

T H E
PROBLEMS OF PHILOSOPHY

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DAS GUPTA & CO., LTD.,
CALCUTTA

Rs. 6/8

Published by A. C. Das Gupta,
Das Gupta & Co., Ltd.,
54/3, College Street, Calcutta 12.

First Published in September, 1949

PRINTED IN INDIA

Printed by S. N. Guha Ray, B.A., at Sree Saraswaty
Press Ltd., 32, Upper Circular Road, Calcutta.

To
THE REVERED MEMORY OF
SIR BRAJENDRANATH SEAL
AND
PROFESSOR HENRY STEPHEN
WHOSE LIVES AND TEACHINGS HAVE INSPIRED
THE AUTHOR

PREFACE

In this book, I have confined myself in the main to those problems of philosophy in regard to which students of philosophy in Indian universities feel great difficulty and need help. In fact, it was at the repeated requests of my students in the Post-Graduate classes of the Calcutta University that the work was undertaken by me several years ago. The problems which come within the limited scope of this volume have been taken from, and discussed mainly in the light of, the history of Western philosophy. Attempt has, however, been made to throw further light on them from the standpoint of Indian philosophy, and say something positive and constructive regarding each problem. It is hoped that the book will serve the needs of university students at different stages, as well as of general readers interested in comparative studies in philosophy.

I am indebted to some distinguished Western and Indian thinkers for the help I have received from their works and duly acknowledged at the proper places. My thanks are also due to Professor Kalyan Chandra Gupta, M.A., P.R.S., and Mr. Anilkumar Ray Chaudhuri, M.A., two of my worthy old students, for their assistance in proof-reading and for some valuable suggestions.

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**THE
PROBLEMS OF PHILOSOPHY**

CHAPTER I

THE CONCEPT OF PHILOSOPHY

The word 'philosophy' literally means love of wisdom and knowledge. But this at once raises the question: Wisdom and knowledge of what? Is it the wisdom of the world and the knowledge of worldly things that we mean by philosophy? If it were so, a man of worldly wisdom would be a better philosopher than an academic one. Or, if philosophy means a systematic knowledge of the physical world, science will have a better claim to recognition as philosophy than pure philosophy itself. It is science that affords a more accurate and reliable knowledge of physical things and events than that given by philosophy. Philosophy has to depend on the sciences for a knowledge of the physical world. If, therefore, philosophy means nothing more than the wisdom and knowledge of the physical world, we may as well do without it and install science in its place. In view of this it would appear rather strange that among philosophers themselves many have taken philosophy to mean worldly wisdom in some form or other. The result is that men have begun to doubt the necessity of philosophy as a study distinct from science.

In the West we find four main conceptions of philosophy. Of these the first is that philosophy is "the synthesis of the sciences". It is the universal science which interprets and unites the results of the special sciences into a consistent system. Each of the special sciences like physics, chemistry, biology, studies a particular department of the physical world and gives us certain truths regarding its own 'subject-matter'. But these truths are limited to particular portions of the world and do not apply

to the world as a whole. Further, the truths and generalisations of the different sciences are sometimes found to conflict with and even contradict one another. Philosophy as a universal science combines the results of the special sciences, reconciles their contradictions, and gives us a general view of the world as a whole. "Science", says Herbert Spencer, "is partially unified knowledge, philosophy completely unified knowledge; the generalisations of philosophy comprehend and consolidate the widest generalisations of science; philosophy is knowledge of the highest degree of generality". The function of philosophy is, therefore, to harmonise the results of the sciences into a consistent world-view.

But the conception of philosophy as 'the synthesis of the sciences' or 'a universal science' suffers from many defects. A synthesis of all the sciences—past, present and future—is an impossible task for any human being. Even if it be possible for a man to acquaint himself with the entire body of present scientific knowledge, it does not lie in him to know the sciences that are yet to be formulated by posterity. The truths of science and the laws of nature discovered by scientists are subject to change and modification from time to time. So long as no finality is reached by the sciences, there cannot be a philosophy in the sense of a completely unified knowledge of the world as a whole. Or, if philosophy is to change and grow with the advance of science, it cannot claim to give us the truth about the whole world. What is true of the world as a whole must always remain true and cannot turn out to be false at a future period of the world's history. In fact, philosophy as 'a *growing* science' would be but science and not philosophy proper. Further, a view of the world as a whole cannot be attained by merely putting together the results of all the sciences. Such a view will be only an

aggregate of all the scientific truths relating to different departments of the world, and not a single truth which is universal and applicable to the whole world. The transition from the many conflicting views of the sciences to one harmonious world-view cannot be explained by science. A view of the world as a whole is not attained by the scientific method of observation and experiment, but by some sort of imaginative or intuitive insight. A total, synoptic view of the universe may be due to a flight of the imagination or a mystic vision, but not to rigorous scientific experimentation. Nor can the world-view be theoretically proved or demonstrated like other scientific truths. Whatever character of the world as a whole we may accept in our world-view, it cannot be scientifically proved unless we have explored all the regions of the infinite universe. Thus the conception of philosophy as a "synthesis of the sciences" or "a super science" is found to be indefensible.

✓ Another conception of philosophy which we find in the West is that it is the 'logical study of the foundations of the sciences'. All the special sciences are founded on certain basic concepts which are not thoroughly examined by them, but are more or less assumed as true. The sciences cannot proceed with the investigation of nature unless they accept the truth of these fundamental concepts. These are the concepts of space, time, causality, substance, identity, etc. It is philosophy that critically examines these fundamental concepts of science by the method of logical analysis. Thus some American neo-realists tell us, 'philosophy is distinguished from the sciences by the breadth of its generalisation, the refinement of its criticism, and the ultimate character of its special problems'.¹ Among British neo-realists Bertrand Russell also holds

¹ Cf. *The New Realism*, p. 42.

the same view when he observes: 'Philosophical knowledge does not differ essentially from scientific knowledge ; and the results obtained by philosophy are not radically different from those obtained from science. The essential characteristic of philosophy, which makes it a study distinct from science, is *criticism*. It examines critically the principles employed in science.'¹

The late Professor Samuel Alexander, another renowned British neo-realist, accepts almost the same view of philosophy, although with an element of ambiguity in it. By philosophy, he means *metaphysics*, and yet holds that it differs from the special sciences not so much in its method as in the nature of the subjects with which it deals. According to him, philosophy is an attempt to study such very comprehensive topics as the ultimate nature of existence, if it has any, and the ultimate categories of experience like space, time and causality, substance and quantity, the individual and the universal. The method of philosophy is, like that of the sciences, empirical. It will proceed like them by reflective description and analysis of its special subject-matter and bring its data into verifiable connection. The subject-matter of philosophy is, in a special sense, non-empirical, while that of the sciences is empirical. But the non-empirical means for him the pervasive characters of experienced things like their spatial and temporal characters, and the empirical means their variable characters like colour, taste and smell. This, therefore, means that philosophy is an empirical study of the pervasive characters of the empirical world, while science is a similar study of the variable characters of the same world.²

The second conception of philosophy as a logical study of the ultimate concepts of science is somewhat corrective

¹ Cf. *The Problems of Philosophy*, p. 233.

² Cf. Alexander's *Space, Time and Deity*, V. I, Introduction.

of the first one. It gives up the hopeless attempt to synthesise all the sciences into an absolutely coherent system: Still, it is no more acceptable than the first. It makes a confusion between science and philosophy. If philosophy be but a logical analysis of scientific knowledge, we do not see how a real distinction between the two can be maintained. Science is a study of empirical facts, and it makes as much use of the method of logical analysis as any other study. If it can thus study the facts of experience and formulate their less general laws and concepts, there is no reason why it should not be allowed to formulate the most comprehensive and fundamental ones, provided they are genuinely scientific. Or, if we require a philosophy to study the ultimate concepts of science, why not allow the same philosophy to study and discover its less ultimate laws and concepts, and dispense with science altogether? As a matter of fact, however, science formulates not only the particular laws and concepts of our experience of the physical world, but also its most general and universal laws and concepts. Philosophy has to depend on science itself for a correct analysis and formulation of both the special and general laws and concepts of the physical world. As the neo-realists themselves contend, many of the laws of pure reason and the forms of thought, which Kant supposed to have deduced *a priori* from the nature of thought, are derived from his knowledge of physics and mathematics. They maintain also that the task of philosophy is not *radically* different from that of the special sciences, and that the difference between them is a difference of degree and not of kind, a difference like that between experimental and theoretical physics. If all this be true we do not understand why we should require any philosophy to do the task of science over again. Rather, we should remain content with

science and have our knowledge of the fundamental concepts of space, time, causality, etc. from science itself in its capacity as a theoretical study.

Professor Alexander's conception of philosophy tries to combine two incompatible concepts of it. By philosophy he means metaphysics and yet maintains that it is one of the sciences, delimited from the others by its special subject-matter. For him, philosophy is the study of 'the *ultimate nature of existence* or of *being as such*', and of the ultimate categories of experience like space, time, causality, etc. But while there may be a scientific study of both the facts and ultimate categories of experience, there can hardly be such a study of being as such, of which we can have no sense-experience. Sense-experience is of particular, determinate things. Being as such or pure being is indeterminate and, therefore, not amenable to sense-experience and scientific study. Philosophy as metaphysics may be the study of pure being, but then it will not be a science in the strict sense. Hence it is rather a confusion of thought to define philosophy as metaphysics of pure being and identify it with science.

Kant's conception of philosophy as 'the metaphysic of experience' is closely allied to the preceding concept. He thinks that philosophy should give up the futile attempt to know ultimate realities like God and the self, and limit itself to the world of experience. But our experience of the world is conditioned by our sense and understanding. What is, therefore, involved in the nature of our sensibility and understanding must govern all knowledge of the world. Philosophy is the logical analysis of the universal forms of sense intuition and categories of the understanding. In so far as philosophy discovers the universal conditions of human experience it gives us certain and *a priori* knowledge of the world of experience. But this knowledge cannot

touch reality as it is in itself. It tells us how reality appears through our sense and understanding. Hence philosophy cannot give us any knowledge about transcendent realities like God and self, freedom and immortality. We may be under the necessity of *thinking* about these realities, but we have no means of *knowing* them. These are only ideas of reason or ideals of thought which we may entertain by way of moral faith, but cannot justify with the help of the theoretical reason.

Although Kant's philosophy is almost unparalleled in history as a type of critical thinking, yet it seems to make a confusion between philosophy and science. If philosophy be only the criticism of sense-experience to find out its universal and necessary conditions, we do not see how it can be distinguished from science. What Kant actually did in his *Critique of Pure Reason* was just a deduction of the fundamental concepts of science from the *a priori* principles of synthetic knowledge. But a discovery of the ultimate concepts of science is the work of science itself or of a logic of the sciences. We do not require a separate study like philosophy to tell us what the ultimate concepts of scientific knowledge are. So for Kant philosophy would be at its best a transcendental logic of the sciences.

✓ Another conception of philosophy which is entirely new and revolutionary has been formulated by the Logical Positivists.¹ According to them, philosophy is neither a metaphysic of experience in the Kantian sense nor a metaphysic of reality beyond sense-experience. It is not concerned with the discovery of the speculative truths and ultimate concepts of science. Nor is it concerned with the knowledge of transcendent realities like God and the self. Metaphysical propositions about transcendent realities are

¹ For an account of Logical Positivism see A. J. Ayer's *Language, Truth and Logic*.

not verifiable in sense-experience and are, therefore, non-sensical. The proper function of philosophy is the logical analysis of the propositions of science. It defines the symbols or words which occur in the propositions of science and exhibits the logical relationships of such propositions. Given certain scientific propositions, it would show how these can be translated into other propositions which can be verified or are in principle verifiable in sense-experience. Philosophy is, therefore, a criticism of scientific propositions to determine their inter-relation and significance in terms of sense-experience. Some Logical Positivists go further and maintain that philosophy is the analysis of sentences and words, scientific or otherwise, in order to disclose their meaning and significance. If they have any use, i.e. if they describe a situation, they have meaning; if not, they are meaningless. In the light of this, the so-called sentences of metaphysics and of ethics are said to be meaningless or pseudo-sentences. Thus Wittgenstein holds that philosophy is the 'critique of language', its business is 'the logical clarification of ideas', of the sentences and concepts of sciences, i.e. the logic of science.¹

We need not here enter on a detailed examination of logical positivism. But we must observe that the logical positivist's idea of philosophy is open to two grave objections. If philosophy be but the analysis or critique of language, what would be the distinction between grammar or the science of language and philosophy? It may be true that ordinary grammar is not sufficiently critical and does not thoroughly examine all the aspects and implications of human language. But that only shows that we require a better grammar which should be more critical, and not that we require a philosophy to perform the function of grammar. If philosophy be the

¹ See G. N. Mathrani, *Wittgensteinian Philosophy*, pp. 3-4.

logical analysis of the concepts and propositions of science, we can very well entrust logic with this task and dispense with philosophy altogether. Or, we may say that science itself in its logical aspect may analyse its concepts and explicate the logical relationship of its propositions. If this be so, we need not go beyond science and formulate a duplicate logic of science in philosophy. This means that we require no philosophy as a distinct study. M. Schlick, the leader of the positivists, was therefore more consistent when he predicted a future era in which there would be no philosophy but only philosophicalness.¹ But the conclusion to be drawn from this is not that there should be no philosophy, but that philosophy should not be identified with the science of language or the logic of science. If philosophy is to be anything distinct from science or the logic of science, it must be a metaphysics of reality beyond sensuous phenomena. What prevents the logical positivists and also Kant from accepting this conception of philosophy is their preconception that all human experience is sensuous and that there is no non-sensuous experience. But that there is such a thing as non-sensuous experience becomes clear when we consider our moral, aesthetic and religious experiences. These are anything but sense-experiences of physical facts. Hence we have to admit that there is a supersensuous reality which is given to us through some kind of non-sensuous or spiritual experience. If this be so, then philosophy can be a metaphysics of reality and yet not nonsensical. The truths of metaphysics may be verified by non-sensuous experience, even if we deny the possibility of their verification in sense-experience.

✓/ The conception of philosophy as the metaphysics of reality was formulated in the West as early as the period

¹ See *The Journal of Philosophy*, July, 1936, p. 408.

of Plato and Aristotle. For Plato philosophy is the 'knowledge of reality, of being *as such*, of that which is'. It is the knowledge of 'the universal, unchangeable, and eternal'. Such knowledge cannot be given by sense-perception which does not reveal the reality of things, but gives mere appearance. It is to be attained through reason. So also Aristotle takes philosophy to mean metaphysics as the science of being *as such* or of pure being. While the special sciences deal with certain parts or phases of being, it is philosophy which is concerned with being *as such* or being as it is in itself. Hence philosophy must be different from any of the special sciences. Among modern Western Idealists Hegel clearly restates this old conception of philosophy when he defines it as 'the science of absolute idea'. "Philosophy," says Hegel, "is not a wisdom of the world, but is knowledge of what is not of the world; it is not knowledge which concerns external mass or empirical existence and life but is knowledge of that which is eternal, of what God is, and what flows out of His nature." F. H. Bradley, a British Neo-Hegelian, has fully explicated this conception of philosophy in his *Appearance and Reality*. He defines philosophy or metaphysics as "an attempt to know reality as against mere appearance."² The objects of our ordinary experience are not real, rather they are the appearances of reality in relation to our thought. A critical examination of the categories or concepts which enter into our knowledge of the world shows how they all involve serious inconsistencies and contradictions. As such, they cannot give us reality which must be free from contradiction. The real cannot be self-contradictory. All objects of thought and ordinary experience being self-contradictory are but appearances.

¹ Cf. Hegel, *The Philosophy of Religion*, V. 1, p. 19.

² Cf. Bradley, *Appearance and Reality*, p. 1.

Philosophy is the attempt to know the reality underlying this appearance of a world of objects.

Of the four main concepts of philosophy which we find in the West, it is the last one, mentioned above, that closely resembles the Indian conception of it. For the ancient Indian thinkers philosophy is the knowledge of reality underlying the phenomenal world (*tattvajñāna*). But this knowledge is not merely an intellectual understanding of the truth, nor a matter of blind faith and unsteady belief. It is the direct knowledge or clear realisation of the truth. For almost all the Indian thinkers, philosophy is the direct experience or vision of absolute truth (*darśana*). According to them, the visible world of space and time, of matter and motion, is not ultimately real. Beyond the physical world there is a transcendent world of reality, an invisible and eternal spiritual order. The spiritual order of reality is the ground of the existence and order of the physical world. We live and act in this visible physical universe in order to realise our moral destiny as immortal selves under the guidance of the universal moral law of karma. The physical world is, therefore, a moral stage for the education and emancipation of individual selves. The physical universe is a manifestation of spiritual reality. It is the appearance of the transcendent world of self or selves under the conditions of time, space, causality, etc. We know the physical world through our senses and reason. But for a knowledge of the real world of spirit, we have to control our senses and bring our desires and passions under the rule of reason. The reason in us is indeed of great help in removing false notions and beliefs regarding the self within and the world outside. But it cannot by itself lead to the direct experience of the self or the spiritual reality. What is absolutely necessary to attain this experience is purification of the mind and constant

contemplation of the self. When we have the direct experience of spiritual reality through moral purification and devout meditation, the critical faculty of reasoning in us must function to justify the truths given by that experience and defend them against sceptical attacks. Thus from the standpoint of ancient Indian thought, philosophy is the direct knowledge of reality as distinguished from appearances. This knowledge is to be attained through purification of the mind and contemplation of the self. And it must finally be explicated and justified with the help of the reason in us.

It will be observed here that while the ancient Indian thinkers agree with Western Idealists like Hegel and Bradley in holding that philosophy is the knowledge of reality as against appearance, they differ from the latter on one important point. According to them, philosophic knowledge as the direct experience of reality is to be attained through contemplation and justified by the reason. For Hegel, however, knowledge of the absolute is given by the speculative reason which he distinguishes from the theoretical reason called the understanding. While the understanding is analytic and has a tendency to break up the unity of the absolute, the speculative reason is the "Reason of the universal which presses forward to unity". The former denies the reality of the absolute, the latter affirms it. But what the speculative reason of Hegel does, or possibly can, give us is a speculative conception and not a direct experience of the absolute. Reason is not a *way of knowing* facts, but a method of rationalising or systematising our knowledge of facts. It is experience alone that can give us knowledge of facts or realities. Reason, even at its best, can give us the notion or conception of a thing, but not any acquaintance with it. Hence on Hegel's view of the matter, philosophy would give us only an idea, and

not any experience of the absolute. Bradley seems to have a better insight than Hegel when he tries to derive our knowledge of the absolute, not from reason, but from the experiences involved in mere feeling or immediate presentation, and in the ideas of goodness and of the beautiful. The absolute is for him a unity which embraces and yet transcends the manifold appearances or objects of the world. Such a unity we find in mere feeling and also in our moral and aesthetic consciousness. In these experiences we seem to have the knowledge of a unity which, like the absolute, transcends and yet contains every manifold appearance. Mere feeling is a unity which contains and yet overcomes the distinction between the subject who feels, his feeling, and the felt object. So also in our moral and aesthetic experiences we have a unity which includes and yet transcends the distinctions of subject, object and their relation. But Bradley has frankly confessed that even these 'supply not an *experience* but an abstract idea of the absolute, and that if we can *realize* at all the general features of the absolute and see that somehow they come together in a way known vaguely and in the abstract, our result is certain'.¹ Thus Bradley seems to admit that certain knowledge of the absolute requires a realisation of it in some direct experience. But he has not suggested any method of attaining this much needed experience. It is here that Indian philosophy recommends moral purification and constant contemplation as the only way of having a direct experience or realisation of the absolute.

From the foregoing discussion it would appear that there are two broad concepts of philosophy which have so far been formulated in the history of philosophy. First, we have the general view that philosophy is a science of

¹ Cf. Bradley, *Appearance and Reality*, pp. 141-42 (italics mine).

some kind and that it differs from the special sciences not in kind but in degree. It deals with the same world as the special sciences do. But while the latter deal with particular parts and special problems of the world, philosophy is concerned with its most general problems and examines them more critically than any of the special sciences. This is what we may call the scientific concept of philosophy, and under it we may bring all such conceptions of philosophy as 'the synthesis of the sciences', 'the study of the fundamental concepts of science', 'the logic of science', or 'the metaphysic of experience'. Under it comes also R. G. Collingwood's idea of metaphysics as an historical science of the absolute presuppositions of scientific thought at any period of its history.¹ We have discussed above these different concepts of philosophy and tried to show how, on the basis of any of them, it is difficult to maintain the distinction between science and philosophy. Rather, we are constrained to hold that to make a science of philosophy, in any legitimate sense of the word *science*, is to make an end of philosophy. If philosophy be really a science, it cannot, consistently with its scientific basis, give us knowledge about any but this physical world. When, therefore, some modern scientists like James Jeans or Max Planck talk of pure thought or universal consciousness as the background of this visible universe, we suspect that they transgress the limits of strict science and give us the messages of their intuitive or religious experience. Observation and experiment, on which science is based, give us no ground for the belief in any universal spiritual background of the physical world. To say that philosophy is not science but a logic of science is not to improve matters much. For a logic of science is really science itself in its abstract and theoretical aspect.

¹ See Collingwood, *An Essay on Metaphysics*, p. 47.

A science like physics or mathematics can and does formulate and examine critically its fundamental concepts, provided they are genuinely scientific. If, however, among the basic concepts or presuppositions of science we introduce theological or metaphysical ideas, it is doubtful whether any logic of science is competent to deal with them.

When, for example, God is said to be the presupposition of natural science in any age, it is no logic of science that discovers or justifies the presupposition. Rather, it is man's religious experience that is the basis of his idea of God. Hence it seems that so far as our knowledge of the physical world is concerned it is science that should give us its fundamental concepts and presuppositions and that we require no philosophy to discover or justify them.

The second broad concept of philosophy is that it is metaphysics or the study of reality as distinguished from appearances. Under this head come the conceptions of philosophy as formulated by some Western idealists and the ancient Indian thinkers. The distinction between reality and appearance is fundamental to this concept of philosophy. This distinction is forced on us when we reflect on the objects of our ordinary experience. These objects possess certain spatial and temporal characters, and sense-qualities like colour, sound, touch, taste and smell. All the characters and qualities of objects are variable and relative to the condition of the perceiver. The same thing appears to have different shapes, sizes, colours etc. for different perceivers looking at it from different positions. Even the same person perceives different qualities—colours, tastes, etc.—in the same thing under different conditions. So the questions arise: What is the real character of a thing? What is the reality of the thing as distinguished from its appearances to our senses? Philosophy is the attempt to know the reality underlying the objects of sense-

experience. It is true that for our sense organs the objects possess a sensuous existence as things with certain sensible qualities. But it is equally true that when out of relation to our sense and mind they have not this kind of sensuous existence. What, then, is the non-sensuous being or existence that appears as this visible world of objects? Reality is the non-sensuous being underlying sensuous objects. How should we know reality? It cannot be known by our senses and reason. What comes through our senses is bound to be modified by the nature of our sensibility, just as all things appear blue when seen through a pair of blue spectacles. Colour, sound, taste and smell are the forms of reaction of our senses to vibrations and chemical actions of physical forces which have in them no colour, sound, etc. Hence the objects of sense-perception must be physical things with sensuous qualities. Nor can reason give us any experience of super-sensuous reality. All that we can have by means of the reason is an abstract idea or concept of the reality beyond sensuous phenomena. It cannot give a direct experience of reality, for it is not an organ of knowledge like the senses. Reason is not a way of experiencing anything, sensuous or non-sensuous, but a way of rationalising our experiences of things. Hence we must seek for some other way of knowing reality. As reality is the non-sensuous being underlying sensuous phenomena we must have a non-sensuous experience of it. All of us are in one way or another in touch with the non-sensuous reality beyond the sensuous world. Some may apprehend reality through intuition, some through religious feeling or through mystical experience. These are perhaps different ways of describing the same fact, namely, an experience in which consciousness and being become identical. In this experience the variations of sense-experience and the fluctuations of thought die out and we

have a pure consciousness which merely *is* and is thus identical with reality or being *as such*. One way of attaining this experience, as recommended in Indian philosophy, is yoga or concentration in which there is the cessation of all mental activities. Philosophy as a metaphysic of reality is *based on* this direct experience of reality, which has been variously described as mystical, intuitive, spiritual or religious experience. But while philosophy is based on this experience, it consists properly in the attempt to *rationalise* the experience or experiences of super-sensuous reality. Philosophy is not merely the intuitive experience of reality. If it were so, it would be indistinguishable from mysticism. But philosophy is not mysticism, although it may have its basis in the mystical experience. It is an intellectual attempt to interpret and understand the universe in the light of our intuitive or mystical experience of reality. Although men as spiritual beings may, in one way or other, be in communion with the super-sensuous reality, yet they are not, strictly speaking, all philosophers or metaphysicians. | Philosophers are men who have the experience of the super-sensuous and make an intellectual attempt to rationalise it so as to enable us to understand the world of ordinary experience and solve the ultimate problems of our life. ✓ Philosophy is thus the rationalisation of our experiences of super-sensuous reality or the intellectual attempt to understand the world in the light of those experiences. To rationalise our experiences of reality is, however, not to *prove* them with the help of sense-experience or scientific knowledge. Rather, it is to justify them by a criticism of the knowledge given by the senses and the sciences to show its inadequacy. ✓ Philosophy may, therefore, be defined also as the criticism of sense-experience and scientific knowledge to justify our experiences of super-sensuous reality.

None of our senses can possibly testify to the reality of God Who is admitted to be a supersensuous being. But that there are certain facts other than the sensuous and that we have a non-sensuous experience of them must be admitted by us when we consider our moral and æsthetic experiences. These are anything but sense-experience of sensuous facts. When we judge anything to be right or wrong, beautiful or ugly, our judgment is based not on the perception of sensuous objects, but on the supersensuous experience of non-sensuous facts. The rightness or wrongness of an action, as also the beauty or ugliness of a picture, is not an object of sense-perception like the colour or smell of a flower. Hence we cannot have any sense-experience of such facts. Our experience of moral or æsthetic facts must be regarded as a non-sensuous experience of non-sensuous facts. To judge the moral character of an action is not to sense a physical quality through any sense organ. It is to apprehend the worth of an action in the light of an ideal of self-perfection. To appreciate the beauty of a thing is not simply to perceive a physical fact, but to have an enjoying experience of self-satisfaction. Thus we have to admit certain supersensuous realities which are apprehended by us through some kind of supersensuous experience.¹

It follows from the above that a knowledge of supersensuous reality or realities is given by supersensuous experience of some kind. This experience is variously described by those who admit its possibility. Kant describes it as an intellectual intuition, while Bergson calls it simply 'intuition'. The former denies that we can have an intellectual intuition of transcendent realities, like God

¹ For a fuller discussion of this subject the reader may be referred to the author's presidential address on 'The Indian Conception of Philosophy' in the proceedings of the Indian Philosophical Congress, 1938.

and self, the only intuition of which we are capable being sensuous. For Bergson intuition is not only possible but is the only method of knowing reality. The same experience is said to be mystical, religious or spiritual by the mystics and the spiritualists. What is common to these different forms of supersensuous experience is the identification of our consciousness with reality. It is a state of pure experience in which consciousness merely *is* and is thus identical with reality or being *as such*. Philosophy as metaphysics does not give us this experience but is based on it. We have the experience or experiences of supersensuous reality in so far as we are spiritual beings and are somehow bound up with the non-sensuous reality beyond the visible world. Philosophy is not a way of experiencing reality but a method of rationalising our experiences of supersensuous reality or realities. Moral purification, meditation and concentration are recognised by the ancient Indian thinkers as the necessary conditions for the attainment of these experiences. When we have the experiences, we may speculate about them and make an attempt to rationalise them. Philosophy consists properly in the intellectual attempt to rationalise our experiences of the supersensuous reality beyond the sensuous world. One may have genuine experiences of the supersensuous and yet make no attempt to rationally understand or justify them. Such a man may be a great mystic or spiritualist but not a philosopher. Contrariwise, a scientist or a logician may have extraordinary powers of analytic and critical thinking and may bring them to bear on his proper subject. But it is doubtful if they can be regarded as true philosophers unless they possess that breadth of vision and depth of insight which enable one to pierce the veil of phenomena and experience the invisible reality beyond the visible universe. It is true that some-

times a critical and comprehensive study of any subject is said to constitute a philosophy of it. Thus we hear of a philosophy of physics, of grammar, of law and so on. The word 'philosophy' seems to be used rather loosely in such cases. A comprehensive study of physics or grammar or law may be called a philosophy of it by way of courtesy, in so far as it reveals the ultimate principles underlying the phenomena dealt with by one or other of these sciences. But in so far as the ultimate principles of a science are laws governing phenomena and are discovered by observation and experiment or by scientific analysis, it should better be called science than philosophy. If, however, any science or scientist goes beyond the limits of the world of phenomena and tells us anything about the supersensuous reality underlying phenomena, we are to say that the science or the scientist ceases to be such and speaks from a plane of thought which is not its or his own.

While philosophy is the rationalisation of our experiences of supersensuous reality, science is the rationalisation of our experiences of sensuous phenomena. The first kind of experiences is intuitive or spiritual, the second is sensuous. The second comes through the senses, the first through no sense, but the mind or the self. Philosophy may thus be said to be the rationalisation of supersensuous experiences, science that of sense-experiences. To rationalise an experience is to find the reasons for it and to relate it to other experiences of the same or of a different kind. Science rationalises sense-experiences by the discovery of their laws, causes and conditions. Broadly speaking, science explains one physical phenomenon by relating it to other physical phenomena under the laws of space, time and causality. Observation and experiment are the characteristic methods of science. It recognises

only such facts—things and events, causes and conditions—as are amenable to its accepted methods. Hence from the scientific standpoint the only causes that are recognised are physical or material. Reasons or ends which are said to be final causes in philosophy are no causes for the strict scientist. This explains also the scientist's inveterate distrust for things spiritual or supersensuous. The scientist spurns the popular beliefs in and the philosophical concepts of God, self, immortality, etc., since these cannot be proved by observation and experiment. Whatever does not come under the law of physical causation and cannot be verified by sense-perception, either directly or indirectly, is for the scientist a matter of blind religious faith or barren philosophical speculation. The limits of scientific study thus coincide with those of the physical world. (Science is a systematic study of the physical world and it brings order and unity into our sense-experiences, by the discovery of their laws and conditions. But sense-experience does not give us the reality of things. What we get from it are the appearances of their reality in relation to our senses. We cannot remain satisfied with the knowledge which the senses or the sciences give us about appearances or sensuous phenomena. Somehow or other we have got a conviction that there is a reality underlying the phenomena of the world. There is in us also an irrepressible urge to know the reality or realities beyond sensible phenomena. Philosophy arises when the human intellect is impelled by this urge to know reality and its relation to phenomena. But there can be no knowledge of anything unless we have some experience of it. To know a thing is to understand our experiences of it, and to understand an experience is to know what other experiences are implied by it. If this be so, then the desire to know reality as against appearance must be based on some primary experience of it. Reality

is the supersensuous being underlying sensible phenomena. Hence it must be apprehended primarily through some kind of supersensuous experience which may be called intuition or spiritual experience. The conviction that there is a reality behind phenomena is the expression of our intuition or direct experience of it. Philosophy is an attempt to know reality in the sense that it tries to understand rationally our experiences of supersensuous reality. There are three fundamental forms of supersensuous experience, namely, the experiences of the true, the good and the beautiful. The supersensuous reality is thus understood as the unity of truth, goodness and beauty. The fundamental concepts of moral philosophy, viz. those of rightness and wrongness, goodness and badness, virtue and vice, are ultimately based on the supersensuous experience of reality as the Good. Similarly, the fundamental concepts of Logic and Aesthetics have their ultimate ground in the non-sensuous experiences of reality as Truth and Beauty. In Plato's philosophy the supersensuous is apprehended primarily as the Good, in Aristotle's as pure Being, in Spinoza's as absolute Substance, and in Hegel's philosophy as the absolute Idea. In a theistic philosophy the supersensuous is interpreted as the unity of Truth, Goodness and Beauty, and we have the conception of God as the wise creator and moral governor of the world and as the source of all that is beautiful in it. In the philosophy of materialism reality is regarded as unconscious matter and as dead to our moral and aesthetic ideals. In modern realism, especially neo-realism, reality is said to be a plurality of neutral entities which are neither physical nor mental. It may here be said that in materialism and realism there is no belief in any supersensuous reality. But that is a mistake. Matter as reality is not an object of sense-perception, but a supersensuous principle which is supposed to be the ground

of all sensuous objects.¹ The neutral entities of the neo-realists are not given in any form of sense-experience. They are said to be obtained by the logical analysis of sensible objects and to be the ultimates in which logical analysis terminates. But an entity which is neither physical nor mental is more accurately described as super-physical and super-mental, i.e. as supersensuous. And it can be known by logical analysis only if we have had previously some neutral (i.e. supersensuous) experience to guide the process of logical analysis. But for some kind of neutral experience in us we could not say and far less know what a neutral entity is like. It thus appears that different systems of philosophy are in one way or other based on the supersensuous experiences of reality and give us different interpretations of it.

A system of philosophy tries to rationalise its interpretation of reality by bringing it into relation to the world of our ordinary experience. It tries to show how its idea of reality can be developed into a system of thought which brings complete order and unity into our life and experience. Sense-experiences are more fragmentary and disorganised than scientific knowledge. The sciences give us a more and more systematic and unified knowledge of the physical world. It leaves out of account the world of supersensuous reality and builds entirely upon sense-experiences. But we have other experiences than the sensuous, and in the light of these we get the glimpses of a reality beyond physical phenomena. For the practical purposes of our life even physical phenomena may be treated as realities in a sense. In philosophy, however, we are concerned not with what is real for a certain purpose, but with what is real in itself. Hence in philosophy there is a criticism of sense-experience and scientific knowledge to expose their defects and incon-

¹ Cf. Lotze, *Outlines of a Philosophy of Religion*, p. 44.

sistencies. A philosophical study of the world proceeds by way of contemplation of the real and criticism of the knowledge given by sense and science. Contemplation and criticism are the characteristic methods of philosophy. The one enables us to attain deeper and clearer intuitions of reality. The other helps us to repudiate false ideas and beliefs, and justify the philosophical view of the world. A philosophical system cannot be proved with the help of sense-experience or scientific knowledge. To justify it is to show how it explains the totality of human life and experiences better than the senses and the sciences. A science does not by itself lead to philosophy. Nor is philosophy merely a synthesis of all the special sciences. The idea that philosophy is a synthesis of the sciences is indefensible. To put together the results of the different sciences is not to attain a view of the world as a whole, but to have an aggregate of scientific truths which may or may not harmonise with one another. Further, the sciences afford no knowledge about the reality of the world. If we were to depend solely on science for our knowledge of the world, what we should get is a systematic knowledge about phenomena, and not any philosophy as a metaphysic of reality. For a knowledge of the physical world we may depend on science, but for a knowledge of the reality underlying physical phenomena we must go beyond science. Hence it is that a philosophical view of the world as a whole can be neither attained nor justified by science. That the ultimate reality is spiritual is a philosophical view which cannot be obtained from or justified by science. It is the immediate experience of the supersensible in us that is the source of our belief in the spiritual character of reality. And this can be justified by a criticism of science, which shows how inadequate and inconsistent the scientific view of reality as material is. It is in this way that Hermann Lotze, a great

German thinker, explains and justifies the philosophic conception of reality as mind or spirit.¹ We are thus led to the conclusion that philosophy can neither be said to be a synthesis of the sciences nor can it be justified by them. If we had none but sense-experiences, sciences should have satisfied us, and the need of a philosophy would not have been felt by us. But that is not to be. We want to know reality beyond phenomena, and so must have a philosophy. It is not science but a criticism of science that can justify philosophy.

While both science and philosophy are the intellectual pursuits of truth, religion is a mode of life. To be a scientist or a philosopher is to think in a certain way and know certain things, but to be religious is to adopt a certain mode of life. Science is an intellectual attempt to know physical phenomena, philosophy is a similar attempt to know reality. Science rationalises our sense-experiences of the physical world, while philosophy tries to rationalise our supersensuous experiences of reality. Religion is not so much an attempt to rationalise any experiences as to attain certain forms of supersensuous experience. It consists mainly in man's effort to attain and maintain the experiences of a supersensible reality and to live a life in conformity with them. It affects and transforms the whole of our life. While science and philosophy make us especially *think* in certain ways, religion makes us think, feel and will in certain specified ways. Religion is based essentially on the experiences of supersensible reality beyond the visible world. While philosophy tries to rationalise these experiences and justify them in relation to the world of our ordinary experience, religion consists in the training of the body and the mind so as to realise the supersensuous in our life and in the world. Moral purification, devout meditation and re-

¹ See Lotze, *Outlines of a Philosophy of Religion*, pp. 50 ff.

nunciation are the keynotes of the religious life. In religion we think of the supersensuous reality as a personal being in whom the highest ideals of truth, goodness and beauty are realised, and by whom the whole world is created, maintained and destroyed at will. A sense of mystery attends our consciousness of this being whom we call God and in relation to whom we have the feelings of awe, trust and love. Lastly, the religious life manifests itself in a series of activities which are calculated to stabilise and perfect the experience of the Divine in us and conduce to the realisation of our unity with God. There seems to be a sharp contrast, nay contradiction, between the religious and the scientific attitude of life. The religious man longs to see God everywhere in the world, the strict scientist finds Him nowhere. Science explains the order and unity of the world, if any, with the help of physical forces and laws. The religious man looks upon them as evidences of the working of God in the world. It seems, therefore, that from science there is no way that leads to religion. If the question be asked whether science or religion is true, the answer is that each is true in its own place, and false in that of the other. Science is a study of physical phenomena in the light of our sense-experiences of them. Hence from the standpoint of science, a real cause must be physical, for the senses can give us a knowledge of only the physical. To explain anything scientifically is to refer it to its physical causes and conditions. In the matter of scientific explanation there is no room for the supposition of divine intervention. The Cartesian theory of occasionalism which explains the inter-relation between our body and mind by God's interference is, therefore, no real explanation of the matter. But when the scientist has explained things and events by their natural causes and conditions, we may interpret them in the light of the moral ends which they subserve. Physical

causes and laws which explain physical phenomena may themselves be the means for the attainment of moral or spiritual ends. The body, we know, is the physical basis of our mental or spiritual life. While the body may be explained by physical causes and conditions, it may be interpreted as the medium of the self's life and activity. Science is solely interested in the physical causes and conditions of things and events, religion is wholly interested in the moral and spiritual ends which are believed to underlie and guide them. The religious faith in the moral and spiritual values of things cannot, of course, be proved by science. In the matter of moral or spiritual valuation science is of no avail, just as in that of scientific explanation the religious faith is more than useless. But if science cannot prove the religious faith, it cannot disprove it either. We cannot brush aside our genuine moral and spiritual experiences simply on the ground that they do not admit of a scientific explanation. Even a scientist can be a religious man provided he has genuine religious or spiritual experiences. The reason why we have religion is fundamentally the same as the reason why we have a philosophy. It is because we are somehow in touch with a supersensible reality beyond the visible world that we have a philosophy which seeks to *know* it and a religion through which we want to *realise* it. While science gives us a reliable and useful knowledge of physical things and events, it fails to do justice to our experiences of supersensible realities including moral and spiritual values. Both philosophy and religion are centred in these supersensuous experiences. But while the interest of philosophy in them is theoretical, that of religion is practical. The one tries to rationalise them, the other tries to develop and perfect them. Science cannot prove the reality of the supersensuous or of moral and spiritual values, since it is limited, by its very nature,

to the sensuous and the physical. Nor can philosophy *prove* them, if 'to prove' means to deduce from higher premises or to verify in sense-experiences. God or the absolute as the supersensuous reality is the highest of all premises which is presupposed in all proof and cannot, therefore, be deduced from anything higher. Nor can we expect to verify the existence of God in sense-experience, since He is the supersensible reality. But if philosophy cannot finally prove the reality of the supersensuous or of moral and religious values, it can justify them by a criticism of science, which shows how the scientific view of the world is inadequate to explain the totality of our life and experiences. Science serves mainly the needs of our practical life and philosophy satisfies those of the intellectual life. Religion perfects our moral and spiritual life. All of them are necessary and should be given their proper places in any scheme of life. A justification, if not proof, of religion comes through a philosophical criticism of science. Philosophy justifies the religious faith in God when it rationalises our experiences of supersensuous reality in relation to the world of sense and science. In view of this we find some truth in Hegel's statement of the relation between philosophy and religion, although it is put a bit paradoxically when he says: "Philosophy, therefore, only unfolds itself when it unfolds religion, and in unfolding itself it unfolds religion".¹

¹ See Hegel, *The Philosophy of Religion*, V. I, p. 19.

CHAPTER III

THE METHODS OF PHILOSOPHY

In this chapter we have to discuss the chief methods of philosophy and indicate what the proper philosophical method should be. A method of philosophy is a systematic and consistent way of attaining philosophical knowledge. What the method or methods of philosophy are depends largely on what philosophy itself means. If by philosophy we mean a universal science which unifies the truths of the special sciences into a consistent system, or a logic of science which critically examines the ultimate concepts and principles of science, then the method of philosophy is in principle identical with the method of science. Such is the view of most modern Western thinkers. The late Professor Samuel Alexander,¹ was wholly in favour of this view of the method of philosophy. He thinks that 'philosophy differs from the special sciences, not so much in its method, as in the nature of the subjects with which it deals. The method of philosophy is, like that of the sciences, empirical'. (This method of philosophy is generally known as *empiricism*. Taken strictly, empiricism is the theory which holds that all human knowledge comes from sense-experience and that whatever cannot be verified by sense-experience is not real. Hence if philosophy is to give us true knowledge about real facts it must be based on sense-experience. But a philosophy which is, like the sciences, based entirely on sense-experience can no more be philosophy than science itself. As a matter of fact, sense-experience alone cannot give us any knowledge in the proper sense. Knowledge is a cognition of reality

¹ See Alexander, *Space, Time and Deity*, V. I, Introduction.

which is true and is also known to be true¹ It is universal and necessary for all men. But sense-experiences, we know, are extremely variable and strictly limited to the present. Our senses cannot tell us anything about the past, distant and future. Sense-cognitions cannot by themselves attain the universality and necessity that pertain to knowledge in the proper sense. Further, what we know from sense-experience are the appearances of things in relation to our senses. The sensible qualities, like colour, taste, smell, etc., with which things are endowed have being only in relation to such sense organs as we possess. What the reality of the things in themselves is we do not and cannot know through our senses. Hence if in our philosophy we were to depend entirely on sense-experience, what we should get is a very meagre knowledge about the phenomena of the world. This knowledge will be limited to the present and will be neither universal nor necessary. It will not also recognise any reality underlying sensible phenomena. We may indeed try to know the realities of things and the past and future conditions of the world from our experiences of present phenomena. But such knowledge would be only conjectural or hypothetical, and never certain and verifiable. Hence we shall ever be in doubt about anything but present phenomena. Empiricism as a method of philosophy thus leads to scepticism. The empiricism of Locke logically leads to the scepticism of Hume. The empiricism of the Cārvākas in Indian Philosophy ends in utter scepticism. In contemporary Western philosophy we see once again how logical positivism is drifting towards a new form of scepticism through its insistent demand for verification of all knowledge in sense-experience. For it, all empirical knowledge including the truths of science is only probable, but never certain. It condemns all metaphysical propositions about transcendent realities as

non-sensical, since these cannot be verified in sense-experience.

Two courses are open to the empiricist at this pass. He may either boldly go forward and accept (scepticism itself as the proper method of philosophy) or he may retrace his steps and modify empiricism so as to make it ~~more~~ acceptable. The first course was followed by the sophists and by Pyrrho in Greek philosophy. Sophism and Pyrrhonism are names which have become synonyms of scepticism. In modern philosophy the sceptical method has been followed more or less rigorously by Hume, Mill and the positivists. *Scepticism* as a method of philosophy consists in doubting and disbelieving every settled opinion, theory or doctrine in philosophy. The sceptic looks around him and considers all things critically, but forms no fixed opinion of his own. He suspends all judgments about truth and reality. For him there is no criterion for distinguishing the true from the false, the real from the unreal, the good from the bad, or the right from the wrong. Every one must judge for himself what is true or false, real or unreal, right or wrong, according to his own feelings and sensations. Hence there can be no universal agreement among men with regard to anything in philosophy. Further, the sceptic denies the possibility of knowing anything beyond sensations. All knowledge about realities like God, soul, matter, substances and causes, is illusory, since of these we have no sensations. If we think that we have a real knowledge about them, we are only deceiving ourselves.

While we may appreciate the sceptical spirit of enquiry, we cannot accept the sceptical method of philosophy. In philosophy there is hardly any room for dogmatism which assumes certain principles as self-evident and axiomatic, and proceeds by deducing conclusions from such unproved

premises. Philosophy is not a matter of dogmatic assertions only. Even if there may be certain self-evident principles, we have to justify them in philosophy and show why they are to be taken as self-evident. Otherwise, one set of dogmas may be opposed by another set and we shall be at a loss to decide between them. *Dogmatism* as a method of philosophy has long since become obsolete. conflict of different dogmatic systems made philosophers suspicious about all philosophic systems and led them to doubt all philosophical theories. It fostered a spirit of critical enquiry among philosophers. The result was that all philosophical ideas and theories were subjected to a searching examination and nothing was accepted on trust. If by scepticism we mean the spirit of critical enquiry, then it is essential for all philosophy. Since the days of Kant every system of philosophy claims to be critical: Any philosophy worth the name should be so and, therefore, sceptical in a sense. But scepticism as an attitude of universal doubt and disbelief is not only impracticable but suicidal. To doubt everything is to make life impossible. We cannot live, as the sceptic would have us live, in a world of mere freaks and uncertainties. Further, the universal doubt, in which vulgar scepticism ends, engulfs the sceptical position itself. If we are to doubt everything, then, to be consistent, we must doubt the grounds of our doubt and will have nothing to stand upon. A consistent sceptic should be sceptical about his own position. If, however, he stands by his scepticism and denies the possibility of knowing anything beyond sensations, he is guilty of the same dogmatism which he wants to repudiate. Whether we can go beyond sensations and know any reality behind them is just one of those problems which we have to discuss and solve in philosophy. The method of scepticism takes for granted that it is not possible to

know anything but sensations, and is so far dogmatic. While the sceptical spirit of critical enquiry is good for philosophy, the sceptical method of doubting and denying everything is the undoing of all philosophy. Philosophy may begin but it should not end, in doubt. Descartes is now acclaimed as the father of modern European philosophy, because doubt was the starting-point and not the end of his thought.

In view of the fact that ordinary empiricism logically leads to scepticism, with all its absurd consequences, modern empiricists are inclined to modify the empirical method of philosophy. They agree with the older empiricists in holding that there can be no knowledge without experience. But they maintain at the same time that knowledge comes, not from mere experience, but through the interpretation of experience. 'The method of philosophy', they say, 'is in principle identical with the method of science, viz. the method of reasoned observation and explanation. It is the method of reasoned reflection.' This means that the method of philosophy is a rational interpretation of experience. It consists in observing facts of experience and interpreting them by means of reason. The late Professor Alexander thus explains the empirical method of philosophy. He thinks that 'philosophy proceeds, like the sciences, by reflective description and analysis of its special subject-matter and brings its data into verifiable connection. It takes all the facts of experience and analyses them into their ultimate constituents and discovers their relation to one another'.² Modern empiricists are at one with their predecessors in accepting sense-experience as the source of all knowledge. There are no innate or *a priori* principles of knowledge which we know from our birth and

¹ Cf. Cunningham, *The Problems of Philosophy*, pp. 79-81.

² Cf. Alexander, *Space, Time and Deity*, *ibid.*

independently of all experience. All the ideas, categories and principles which our reason uses in the interpretation of experience come from experience itself. But although our knowledge springs from sense-experience, it is possible for us to arrive at universal and necessary principles, and also to know the realities which lie underneath sensations. The knowledge of universal principles and of realities is attained by rational reflection on the contents of sense-experience. In holding this view modern empiricists seem to revive the old and somewhat inconsistent empiricism of John Locke. As an empiricist Locke holds that all knowledge comes from experience, and yet he concedes that we have a real knowledge of substances underlying sensible qualities—of matter, soul and God. He thinks that the idea of substance and of the relation of cause and effect is derived from sensation and reflection. Similarly, the modern empiricists try to base their philosophy on sense-experience and yet profess to give us a knowledge of universal principles and of realities transcending sense-perception.

Although modern empiricism tries to save itself from the impasse of scepticism, it is doubtful if it really succeeds in the attempt. It is true that it takes the help of reason to interpret experience and thereby arrive at a system of truths about the world of experience and the realities which lie beneath it. But if all the ideas and principles by which reason interprets experience are given by sense-experience itself, we do not see how we can get at universal and necessary principles or have a knowledge of realities beyond experience. We may interpret one experience by another or other experiences and thereby anticipate a future possible experience. In this way we may pass from one sense-experience to another, but not to anything which transcends sense-experience altogether. When the modern

empiricist thinks that by 'reasoned reflection' philosophy can, like the sciences, give us universal and necessary principles or a knowledge of reality beyond phenomena, he is perhaps deceiving himself. The universal principles and realities of science are not really so. All empirical propositions, including the truths of science, are only probable and not absolutely certain. Whatever knowledge we get from sense-experience cannot be necessary and universal. Sense-experience can never tell us that something is true not only in the past and the present, but also in the unknown future and in distant regions. All that we can know from sense-experience is that something is true so far as our experience goes, and not that it *must* be true even where our experience does not extend. Hence if the principles by which reason interprets experience be themselves empirical, they would be no more universal and necessary than the experiences which generate them. Further, sense-experience cannot give us a knowledge of the realities which underlie sensations. We may interpret sensations by the ideas or categories of reason. But if these ideas and categories are themselves the products of sensations, they cannot possibly help us to go beyond sensations and know anything which lies beneath them. It may here be said by the empiricist that the real is just what is given in experience and that there is no other reality beyond it. But if by experience the modern empiricist means sense-perception, then he can no more claim a knowledge of reality than the sensationist or the sceptic. Sense-perception presents to us things, not as they really are in themselves, but as they appear to our senses. Hence to depend on sense-experience is not to know reality but sensuous phenomena. If, however, for the knowledge of realities like God and soul, the empiricist admits the possibility of any non-sensuous experience, he gives away

his whole cause and ceases to employ the scientific method of 'reasoned observation and explanation' in his philosophy. This seems to be the case with Professor Alexander¹ who proposes to give us an empirical metaphysics by the scientific method of 'reflective description and analysis of experience' including religious emotion or experience, of which God is said to be the object. Here Professor Alexander makes a confusion between ordinary sense-experience and religious experience which is not sensory in character and forgets that the scientific method is strictly applicable only in the case of sense-experience.

Some other philosophers like Descartes, Spinoza, Leibniz and Wolff adopt the method of *rationalism* as the proper method of philosophy. They are known as rationalists because they accept reason instead of experience as the source of philosophic knowledge. Both the empiricists and the rationalists are opposed to revelation or authority in the sphere of philosophical study. For both the aim of philosophy is the attainment of a system of universal and necessary principles which are logically inter-related among themselves. But while the empiricists believe that philosophy can attain its object with the help of sense-experience only, the rationalists deny this and hold that philosophy must be based on thought or reason alone. Sense-experience does not give us anything but sensations and feelings. It tells us nothing about the realities which underlie sensations. Further, sense-experiences cannot give us universal and necessary principles, for they are limited to the present and cannot tell us anything for certain about the past and the future. Hence if philosophy is to give us certain and universal knowledge, it must be based on such principles as are self-evident and absolutely certain. Thought or reason has in it some such self-evident

¹ See Alexander, *Space, Time and Deity*, V. II, pp. 341-54.

and necessary principles. These are natural or native to reason, so that whoever has reason in him finds them to be self-evident and certain. They are innate or *a priori* truths which lie implicit in the mind from our birth and prior to all experience. Philosophy must start from such self-evident and *a priori* truths, and pass from these to ~~others~~ which necessarily follow from them. In this way we can construct a system of philosophy which will be as certain as mathematics and in which there will be no room for doubt and dispute. The method of rationalism is also called *a priorism*, since it takes the principles of knowledge to be prior to or independent of experience. It is sometimes known also as *intuitionism* because it takes only that which is clearly and distinctly perceived, i.e. intuited, as necessarily true and certain.

The method of rationalism, as explained above, has obviously a touch of dogmatism in it. It is as much dogmatic to say that all knowledge comes from sense-experience as to say that it comes from reason alone. Whether our knowledge of the world, as we actually have it, can be explained by sense-experience or reason alone, or whether it owes its elements to both, are open questions which we have to discuss and decide in philosophy. To say without due examination that all knowledge comes from experience or reason alone is to prejudge the issue dogmatically. Supposing, reason gives us certain self-evident truths from which we can logically deduce others and thereby construct a system of knowledge, what guarantee is there that this thought-construction really agrees with the actual world in which we live and move? By mere reasoning we cannot prove the correspondence of our thoughts with things, of our rational ideas with empirical facts. As a matter of fact, however, there is hardly any agreement among men as to what truths are

self-evident and what not. What is self-evident to one, may not be so to another. Even the laws of thought like those of identity and contradiction are sometimes doubted and disputed by some philosophers. Spinoza's idea of 'substance' and Leibniz's theory of 'monads' are not now as self-evident as they were originally supposed to be. These have been not only doubted but rejected by subsequent thinkers. The rationalists take reason as the source and norm of knowledge. They think that reason gives us certain self-evident truths and also helps us to argue about and test the validity of our knowledge. But it seems to us that reason is not a way of directly *knowing* anything but a method of criticising or testing the knowledge we already have of things. It is experience alone that can give us a direct knowledge or acquaintance with facts or realities. On the basis of such direct knowledge reason may try to know other things indirectly and justify or criticise both our direct and indirect knowledge of things. It is in sense-experience that we have a direct knowledge of physical things. If, therefore, there be anything, principle or reality, which cannot be sensed by us, we must admit some kind of supersensuous experience to explain our knowledge of it. Some rationalists virtually admit this when they say that we have an *intuition* of certain self-evident truths which are innate or native to reason.

The difficulties in which the methods of empiricism and rationalism are involved led Kant, the great German philosopher, to formulate another method which is known as *criticism*. This method takes knowledge as we actually have it and tries to find out by analysis the conditions which make it possible. The existence of Mathematics proves that our knowledge is on the one hand real and synthetic, and on the other universal and necessary. It

gives us new information about facts of the world and it is true for all minds and at all times. Under what conditions, then, is it possible for knowledge to be such? From experience we may get information about particular facts of the world. But from mere experience we cannot know that what is true of this or that fact is true of all other facts of the same kind. Experience cannot explain the characters of universality and necessity in knowledge. These can be explained only if there are certain elements in knowledge which are due to the nature and constitution of the mind which knows. What is involved in the very nature of our mind must be true of all minds. Space, time, causality, substantiality, etc. are such forms and ideas or categories which govern all knowledge because they are inherent in the mind of all rational beings like us. These are the *a priori* elements of human knowledge because they are not derived from experience but come from within the mind whenever it knows anything. But from the *a priori* forms and categories which have their origin in the nature of mind we know nothing about the particular facts of the world. To know space as a whole is not to know the existence of particular objects in space. Hence the synthetic character of knowledge, i.e. its reference to facts, cannot be explained by the *a priori* elements involved in knowledge. For real information about particular facts, knowledge depends on experience or sense-intuition. Experience supplies the data or materials of knowledge in the form of sensations. These are interpreted by the mind through the application of the *a priori* forms and categories of space, time, substance, causality, etc. It is in this way that we get our knowledge of the world as a system of things and events, existing in space and time, and being the same for all minds. But the world which we know cannot be regarded as real in the strict sense. It is rather

a world which we construct out of the materials supplied by sensations and by application of the forms and categories supplied by mind. What we know is not reality as it is in itself, but as it appears through our senses and the categories of our mind or understanding. We cannot know anything except through sense-intuition and the categories. Therefore, we can never *know* reality or things-in-themselves, although the Reason in us may be under the necessity of *thinking* of them. If we had the capacity of a non-sensuous or intellectual intuition, then possibly we could know reality. Since, however, we have no such capacity, reality remains for us unknown and unknowable. Our knowledge is limited to the world of phenomena or appearances, although that world is objective in the sense that it is universal and necessary for all minds. Beyond phenomena there is no doubt the reality in which they are grounded. But neither science nor philosophy enables us to know what it is.

The Kantian method of criticism, it will be seen, combines those of empiricism and rationalism, and ends in a sort of agnosticism. It shows how our knowledge depends on sense-experience for its materials, and on reason (which Kant calls understanding) for the categories by which we interpret sensations and build up our conception of the world as a system of objects existing in space and time. But by following this method we are finally led to the view that the world of experience is phenomenal and not real. Reason, in the higher sense, constrains us to think of a transcendent world of reality beyond the world of phenomena. But for Reason this noumenal reality remains a mere idea or an ideal which we have no means of realising in experience. Reality thus remains for us for ever unknown and unknowable. Herein lies the strength as well as the weakness of Kant's method

of criticism as the proper method of philosophy. It gives us a metaphysic of experience, in the sense that it reveals by logical analysis the ultimate conditions on which knowledge, derived from sense-experience and science, depends. But it fails to lead to any metaphysics in the sense of a knowledge of reality beyond phenomena. The reason why Kant's critical method ended in agnosticism is that he limited intuition to sense-experience. If we had none but sense-intuition, then all knowledge of reality would certainly remain impossible for us. But there is another kind of intuition which is called intellectual, because it is not mediated by sense and understanding. Kant believes that it is intellectual intuition which can give us a direct knowledge of reality, but he leaves it as a mere logical possibility. For Kant an intellectual intuition of reality is possible, but not actually attainable by us. But Kant here forgets that it is just on the basis of an intellectual intuition that he can possibly be so sure of reality as to declare all other things phenomenal. But for some experience of it, we could not know or even think of any reality as contrasted with phenomena. Professor H. J. Paton, a great Kantian scholar, seems to admit the actual presence of an intellectual intuition in Kant himself when he says, 'it does not appear that Kant *argued* from the existence of the given to the reality of things-in-themselves as its necessary cause. Rather he would seem to regard the thing-in-itself as immediately present to us in all appearances'.¹ If this be so, then we are to say that the critical method of philosophy should recognise the value and importance of non-sensuous or intellectual intuition to give us a knowledge of reality. If it does not, it is bound to end in *agnosticism* which holds that the world we know is phenomenal and that the real is unknown and

¹ Cf. Paton, *Kant's Metaphysic of Experience*, V. I, p. 70.

unknowable. But this is rather an inconsistent position, since it allows such knowledge of reality as would enable us to judge the world as phenomenal and reality as non-phenomenal and unknowable.

But philosophy is not, like the sciences, the knowledge of the world of phenomena. Nor is it a mere critical study of experience to discover its pre-conditions, i.e. its universal forms and concepts. On the other hand, philosophy is the study of reality, the attempt to know reality as distinguished from phenomena. But for this, the methods of philosophy so far considered are found to be inadequate. Hence philosophy must follow some other method than these to attain the knowledge of reality. It is just this idea of philosophy as the knowledge of reality that has led Hegel and his followers to employ the method of *dialectic* as the proper method of philosophy. Kant's critical method leads to agnosticism because he proceeds on the idea that the forms and categories of knowledge have their origin in our mind and are, therefore, subjective. They do not apply to the real world lying beyond our mind or its experiences. It was Hegel's conviction that the forms and categories through which our thought develops and seeks to know the nature of the experienced world are not confined to our mind but are realised in the nature and constitution of reality itself. There is a fixed order in the development of our thought through these categories. First, we affirm some idea or conception of a thing (i.e. a *thesis*). Then, finding its imperfection we are led to affirm the opposite idea or conception of it (i.e. its *antithesis*). But the opposite idea, in its turn, is found to be as one-sided as the first. This leads us to affirm a higher and more comprehensive idea which includes and reconciles the first and its opposite (i.e. *synthesis*). Thus we first think of a thing as a group of qualities

without any substance. Secondly, we think of it as a substance without qualities. But both of these ideas being one-sided and imperfect we are finally led to the idea of the thing as a substance which is manifested through its qualities. It is this dialectical process that governs the development of thought from the lowest or most inadequate category to the highest or the most perfect. Thus we pass from the idea of reality as mere "Being" to the speculative conception of it as the "Absolute Idea" or self-conscious spirit. The same dialectic process governs the development of the real, objective world existing in relation to our mind. The successive stages in the development of thought can be detected in the evolution of the world and in history. In his philosophy Hegel tries to show how the facts of Physics, History, Ethics and Religion illustrate the dialectical process. Hence for Hegel the forms and categories of knowledge are also the forms and modes of being or reality. Logic as the science of the forms and categories of thought will thus be identical with metaphysics as the study of reality. To know the ultimate principles of knowledge is also to know the ultimate principles governing the world.

The dialectical method of Hegel stands or falls with its fundamental assumption that thought and reality are identical. If our thought or consciousness were identical with reality and if the process of thought in us were creative, then perhaps we could say that the forms and categories of thought were also the forms and categories of reality. But so far as we know, human thought is not creative but representative of reality. For us to think of anything is not to bring it into existence, but to have an idea or concept of it. Thought, therefore, gives an *idea* of the object, but not any direct experience or acquaintance with it. In so far as this is the case, we

cannot say with certainty that human thought is identical with reality or even that it directly reveals reality. The progress of the special sciences also shows how arbitrary and untrustworthy Hegel's enumeration of the categories of reality is. There are some scientific categories which have no place in the list of categories given by Hegel. With the advance of the sciences other new concepts ~~and~~ categories may be found necessary for the interpretation of the experienced world. The Hegelian account of the categories would require modification whenever this actually happens. In fact, Hegel's account of the number and order of categories was mostly dependent on his knowledge of the sciences of his own times. Some of the greatest followers of Hegel are now convinced that the dialectical method is not so much a way of knowing reality as a way of arranging and examining the concepts through which our mind passes in its attempt to form a finally satisfactory conception of reality. Dialectic is a method of criticism and not of knowledge. It helps us to criticise the concepts or categories through which we want to rationalise the knowledge of reality obtained by some other means. It can, at its best, give us a consistent *conception* of reality, but not any direct knowledge of it. For a direct knowledge of reality we are to depend on some experience of it, which is different from ordinary sense-experience. While sense-experience is mediated through the forms and categories of the mind, the experience of reality is a pure intuition unmediated by sense and understanding. It is an 'intellectual intuition' or spiritual experience in which our thought or consciousness is divested of all forms and categories, and in its pure being manifests itself as identical with reality. When we have the experience of reality in this way we may try to justify it in philosophy by the method of criticism.

For the ancient Indian thinkers philosophy is not merely a matter of intellectual understanding of or theoretical speculation about truth and reality. It is a direct experience or realisation of absolute truth and reality (*darśana*). Hence the method of philosophy is, for most Indian thinkers, a combination of experience, reasoning ~~and~~ contemplation. All philosophy must be based on the experiences of the self within and the world outside us. These experiences may be either the normal experiences of ordinary men or the intuitive experiences of saints, seers and prophets. The Cārvāka, Nyāya, Vaiśeṣika and Sāṅkhya systems of Indian philosophy take ordinary experience as the basis of philosophy. But some other systems like the Bauddha, the Jaina, the Mīmāṃsā and the Vedānta, maintain that in such matters as ultimate reality, liberation, etc., we cannot form any correct idea from ordinary experience; philosophy must depend for these on the intuitions of seers and saints who have a direct realisation of such things and whose experiences have been preserved for us in the scriptures. Hence it is sometimes held that a student of philosophy should begin with the study of the scriptures (*śravaṇa*) which, when carried on in the right spirit, initiates him into the truths of philosophy. It is here that testimony or authority may be said to have a place in philosophy. But from this we should not think that authority is the sole ground of philosophy and accept the method of *authoritarianism* in philosophy. To do so is to have faith, but no philosophy. A faith in the scriptures may have its own value, but it does not rise to the level of reasoned knowledge without which there can be no philosophy. Hence the second step in philosophical study is reasoning or criticism of experience (*manana*). Here the student of philosophy is advised to examine thoroughly all experiences including the teachings

of the scriptures and see for himself if there are conclusive reasons for accepting them as true and valid. If after due examination of the scriptural teachings in the light of his own experiences and by the application of logical canons, he finds them rational, then and only then he should accept them as true. Otherwise, he is under no obligation to accept them, but may even reject them. This rationalistic spirit of free criticism is conspicuous in the Cārvāka, Bauddha, Jaina, Nyāya and Sāṅkhya systems. The Mīmāṃsā and the Vedānta are indeed based on the authority of the Vedas. Still, they make as much use of the method of logical criticism as any other system of Indian or Western philosophy, and support their theories by such strong and cogent arguments as to make them independent of the authority of the scriptures.) A rational and critical study of all experiences is thus necessary for the attainment of philosophical knowledge. But the realisation of the truths of philosophy does not come by way of reasoning alone. By means of reasoning and criticism we can detect the errors in our experiences, and in the ideas and concepts based on them. We can also justify and defend certain truths by adducing good reasons in support of them. But by mere reasoning we can neither know the truth nor realise it. For the realisation of philosophical truths all Indian thinkers, excepting the Cārvākas, recommend moral purification, contemplation (nididhyāsana) and concentration (yoga) as the necessary means. To them, these constitute the third and the most important part of the method of philosophy. God, self, immortality and freedom are some of the truths of philosophy. All proofs that have so far been given by philosophers in support of these truths leave us as unconvinced as ever. What is necessary to remove finally our doubts about them is a direct experience or clear

realisation of these truths. And this must be attained, if at all, by constant contemplation of the truths. This enables us to realise the self or God as the absolute truth.

We may now explain what the proper method or methods of philosophy should be, consistently with our conception of philosophy. This may be restated here. Philosophy, by which we mean metaphysics, is an intellectual attempt to rationalise our experiences of supersensuous reality. Science gives us a systematic knowledge of the physical world by rationalising our experiences of it. We get these experiences through our senses and rationalise them by relating one to the others under the laws of space, time, causality, etc. Science may thus be said to be the rationalisation of sense-experiences. But sense-experience does not give us the reality of a thing as it is in itself, but as it appears in relation to our sense-organs. The objects of sense-experience are phenomenal and not real in the highest sense, since they are relative to our sense and understanding and do not stand for the reality of things in themselves. It follows from this that we cannot have any sense-experience of ultimate reality, for whatever comes through our senses is bound to be modified by the nature of our sensibility and understanding. If we are to know reality at all, it must be through some sort of supersensuous experience which is not mediated by sense and understanding. It is, in Kant's words, an intellectual intuition that can give us an insight into reality. Philosophy does not help us to get this experience or intuition. All that it can do is to rationalise the experience or experiences when we have them. Philosophy is thus based on the supersensuous experiences of reality and it consists in the intellectual attempt to rationalise those experiences. Philosophy is the attempt to know reality in the sense that

it tries to understand or rationalise our experiences of supersensuous reality. Philosophy is not merely the intuitive experience of reality. It is an intellectual attempt to understand and rationalise the intuitive experiences of supersensuous reality by relating them to the world of ordinary experience and interpreting it in their light. Philosophy is thus the rationalisation of experiences of supersensuous reality or the intellectual effort to understand the world in the light of those experiences. But to rationalise our experiences of the supersensuous is not to *prove* it with the help of sense-experience or scientific knowledge. What is supersensuous cannot be perceived through the senses. Science also cannot prove the reality of the supersensuous, since it is, by its very nature, limited to sense-experience. What is not given in or verifiable by sense-experience, either directly or indirectly, does not come within the purview of science. Hence to rationalise our experiences of supersensuous reality we do not get much help from sense-experience and scientific knowledge. To rationalise them is to show how an interpretation of the world, as based on these experiences, makes our life and all its experiences more intelligible and harmonious than any knowledge given by the senses or the sciences. Philosophy is completely unified knowledge in the sense that it explains the totality of our life and its experiences better than any other knowledge. To show that this is so, is to rationalise the intuitive or supersensuous experiences of reality on which philosophy as metaphysics is based.

It follows from what we have said above that the method of philosophy must be critical in character. To justify the philosophical view of the world we have to examine critically the common-sense and scientific views of it and detect their errors and inconsistencies. We have

to examine also all our ordinary concepts and theories and see if they stand the test of a rigorous logical criticism. With this end in view we shall analyse and examine our various experiences and try to discover their ultimate implications. If after a critical examination of the ordinary and ~~the~~ scientific concepts and theories we find that ~~they~~ do not accord with the totality of our experiences and their implications, as much as the philosophical view does, then we are justified in accepting it as the most rational interpretation of the world. But the task of the philosopher does not end with the criticism of ordinary and scientific knowledge to show their inadequacy. While this may convince him of the inadequacy and inferiority of the knowledge given by common sense and science, it will leave him rather unconvinced of the truths of philosophy. He may even *feel* sure of these truths, but he cannot *know* them to be *certain* unless he has a direct experience or realisation of them. Thus Bradley, as we have already seen, confesses that such sources of our knowledge of the absolute as mere feeling or immediate presentation and our moral and aesthetic experiences 'supply not an experience but an abstract idea of the absolute, and that if we can *realize* at all the general features of the absolute and see that somehow they come together in a way known vaguely and in the abstract, our result is *certain*'.¹ A certain knowledge of absolute reality and of the ultimate truths of philosophy requires a realisation of them in direct experience. And this must be attained, if at all, through continued meditation and contemplation of them. The truths of philosophy cannot be verified in sense-experience; nor can we prove them scientifically. The only way in which they can be known by us is rational reflection on and constant contemplation

¹ Cf. F. H. Bradley, *Appearance and Reality*, pp. 140-42 (italics mine).

of them. As Professor K. C. Bhattacharyya has truly said : 'Metaphysics, or more generally, philosophy, is not only not actual knowledge, but is not even literal thought; and yet its contents are contemplated as true in the faith that it is only by such contemplation that absolute truth can be known.'¹ Thus philosophy as metaphysics is based on some original but indefinite experiences of supersensory reality and is completed by criticism and contemplation, through which we rationalise and realise its truths. Criticism and contemplation are, therefore, the characteristic methods of philosophy, or more correctly speaking, the two constitute the proper philosophical method.

¹ Cf. *Contemporary Indian Philosophy*, p. 66.

CHAPTER IV

THE NATURE OF KNOWLEDGE

With regard to the nature of knowledge, a distinction should be made between its essential and functional characters, or what is the same thing, between its metaphysical and its empirical nature. Metaphysically speaking, a thing is what it *is* in itself, apart from and independently of its relation to other things. Empirically speaking, however, a thing is what it *does* or how it affects other things. For a thing, to act means to come into relation to other things affected by its action. The relations in which one thing stands to other things are either its actions on those things or the expressions of its actions on us. Hence we may say that from the empirical standpoint we consider the nature of a thing as related to other things, while from the metaphysical we try to know what the thing is in itself, apart from its relation to other things. It has, of course, been held by certain philosophers, especially the empiricists, that a thing is what it does, or that a thing is constituted by its relations to other things. Apart from the other difficulties in which such a view is involved, it is plain that it makes a confusion between *being* and *doing*, essence and action. To *be* is not to *do*, or to exist is not always to act. If it were so, we should have said that there is no air in a closed room because it does not blow, that there is no water in a tank because it does not flow and that a man ceases to exist when he sleeps soundly. Since, however, neither ordinary language nor logical analysis allows such expressions, we ought to make a distinction between the existence and action of a thing and hold that it may be considered in respect of both.

In the case of knowledge also we propose to make a similar distinction and study its metaphysical and empirical nature separately.

It may be objected here that while the distinction between essence and function may hold good in the case of a thing or a substance, it is misleading in the case of that which is nothing but a mere function of something. Not only the older empiricists and materialists but even some modern realists, not to speak of the behaviourists, regard mind, consciousness and knowledge as mere functions of the brain or the nervous system. If they are right, then with regard to knowledge no distinction can be made between essence and function, between existence and action. We shall hereafter consider more fully the question whether knowledge is a function of the body or the brain or the nervous system. Here we may just point out that a distinction between essence and function holds good in the case of anything that has being, while it is not acting or functioning. It does not matter much whether we call it a thing or substance, quality or relation, activity or function. A *current* of water or electricity has no being apart from what *it is doing* or *its flowing*. Although the exigencies of human language make it incumbent on us to refer to the current by using the pronouns 'it' and 'its', yet we are convinced that they mean just 'doing' and 'flowing' respectively. For a current to *be* is to *do*, to exist is to act or flow. Hence with regard to a current no distinction is ordinarily made between its essence and function. When, however, we treat the water or electric current as a persistent or enduring fact and contrast it with its varying effects like forming gravels, lighting lamps, etc., we may make a distinction between the current and its functions. But while the current of water has no being apart from its function, water itself is a material substance

which has being even when it is not functioning in this or that way. Water exists even when it does not flow or quench anybody's thirst. Hence with regard to water there is no impropriety in asking the questions, 'what it is in itself and what it does or how it acts in relation to other things'. Similar is the case with knowledge. Knowledge has being even when it is not functioning or knowing anything. It may seem paradoxical to say that there may be knowledge which knows nothing. Since, however, knowledge as mere sentience or pure consciousness is not only a logical possibility but a psychical fact admitted by many older and modern thinkers, we may and usually do use the word 'knowledge' in the sense of a conscious essence or existence which may *be*, even when it *does* nothing by way of cognising objects. The concept of 'pure experience' adumbrated by William James in his *Essays in Radical Empiricism* fairly represents knowledge in this sense, although he himself does not so use it. Some modern psychologists speak of an objectless thought and others of a subjectless cognition. If there can be such a thing as bare experience without any reference to a subject or an object, then it would give us what we call the essential nature of knowledge. With this essential nature of its own knowledge may function in different ways in relation to different objects. It is true that this essential nature of knowledge is generally described as consciousness or mind or self, of which knowledge in the ordinary sense is said to be a quality or function. As it will appear in the sequel, we are prepared to accept this description of knowledge in its essential nature as pure consciousness, mind or self. But what we want to emphasise here is that knowledge has this essential nature which should be neither ignored nor confused with its functional character in a philosophical study.

Even in deep dreamless sleep a man knows or experiences the state of sleep, although he is not aware of any object. How, otherwise, are we to explain the subsequent memory of what takes place during sound sleep, as that is clearly attested by judgments like 'I slept *well*', 'I knew nothing', which one passes on waking from deep sleep? Hence with regard to knowledge the distinction between ~~the~~ essence and function is not only permissible but also indispensable. There has been much confusion in the study of the problems of knowledge because some philosophers have lost sight of this important distinction.

Keeping in view the above distinction we shall first consider knowledge in its empirical character and then proceed to discuss its metaphysical nature. Knowledge in its empirical character may be considered from the standpoint of psychology or of logic. Viewed from the psychological standpoint and considered empirically, i.e. in the light of what it does, knowledge may be defined as the awareness or apprehension of objects. The object of knowledge may be a thing or a quality, a mental state or a physical entity, the existent as well as the non-existent. In every case in which there is knowledge there must be something which stands out as its object, and it consists simply in the manifestation of the object. All things are made manifest or revealed to us when they become objects of knowledge. Knowledge may also be regarded as the ground of all intelligent activity. It is on the basis of knowledge of some kind that all living beings deal with other objects of the surrounding world. A living creature behaves differently in relation to different objects because it somehow knows them to be different.

Knowledge as the apprehension of objects is different from feeling or affection and volition. While the latter two mental states relate to some object or other, they are

not related to it by way of knowledge. Something different is meant when one says 'I *know* a thing', from what is meant by saying, 'I desire or will or do something, or am simply pleased or displeased with it'. Although knowledge is distinguishable, it is not separable, from feeling and volition. Knowledge is a cognitive process by which ~~we~~ have an apprehension or understanding of objects. But it is bound up with certain affective elements, namely, the feelings of pleasure and displeasure, according as the known objects are pleasurable or painful. Through such feelings knowledge leads to certain conations, viz. desire, aversion and volition in the form of an exertion to obtain pleasurable objects and avoid painful ones. Hence knowledge may be said to be a cognitive phenomenon which is always connected with conation through the mediation of feeling. Along with the knowledge of an object there is a feeling of being pleased or displeased with it and an active attitude of desire or aversion which may lead to certain overt movements towards or away from the object. Still, knowledge is not, as some psychologists believe, at once a phase of cognition, feeling and conation. In cognising an object we may also *cognise* its pleasurable or painful character and also become *conscious* of certain tendencies in relation to it. But the actual feelings of pleasure and pain or the conative processes of desire, etc., take us beyond cognition, although they may arise out of cognition. Knowledge is not, and does not contain within itself, a phase of feeling or the will, although it may be always connected with them. Even as an empirical phenomenon it has a distinctive and self-sufficient character of its own and should not be reduced to or confused with feeling or volition.

From the psychological standpoint we have defined knowledge as the apprehension or cognition of objects

whether right or wrong. As such, knowledge includes all cognitive states and processes of the mind, like sensation, perception, memory, imagination, inference, doubt, dream, illusion, etc. It stands, as the late Professor Alexander also has said, "for all kinds of apprehension of objects, whether sensation, or thought, or ~~memory~~, or imagination, or any other".¹ In psychology knowledge is understood in a wide sense so as to comprise both true and false perception, inference, memory, etc., as well as dream and doubt. Psychology as a positive science of mental phenomena is not so much concerned with the truth or falsity of cognitions as with their description, analysis, and explanation. Hence all cognitive facts are regarded as instances of knowledge, no matter whether they are true or false, or neither true nor false. A true or veridical perception is as much a case of knowledge as a false or erroneous one. Illusions, hallucinations and dreams also are cases of knowledge, since we have in them different kinds of apprehension of objects, although their objects being contradicted, they are classed as invalid or erroneous perceptions. That illusion and hallucination are cases of wrong perception is generally admitted by psychologists. But with regard to dream there is some difference of opinion among philosophers, and some hold that dream is a kind of false *memory*, while others maintain that it is more like perception than memory or inference, and so must be regarded as a form of erroneous perception. While we prefer the second view, we should make it plain that as a form of erroneous perception dream is different from illusion and hallucination. It stands midway between perception and memory, but is more akin to the former than to the latter. Dream is a sort of creative perception in which the dreamer creates a world of objects which resemble in many respects

¹ Cf. *Space, Time and Deity*, V. II, p. 82.

the objects of our waking experience and are considered by the dreamer to be as real as the latter. Since, however, dreams have not the regularity and orderliness of our waking perceptions and are subsequently contradicted by our waking experiences, we eventually reject them as false and fanciful cognitions. Doubt is, like dream, a form of knowledge. It is rather unusual to speak of doubt as a kind of knowledge. But when we remember that by knowledge we here mean any way of cognising objects, and that doubtful cognition is a cognition none the less, and not feeling or conation, we seem to be justified in bringing it under knowledge. Doubt is not merely the absence of assured cognition or of conviction. It is not the mere negation of knowledge. It is a positive state of the cognition of mutually exclusive characters in the same thing and about the same time. To doubt is to entertain conflicting notions with regard to the same object and refer two or more contrary or contradictory properties to it in alternation. In it the mind oscillates between different alternate characterisations of some given object. As a mental state doubt is different from both belief and disbelief. It neither affirms nor denies anything, but only raises a problem for thought. As such, doubt should be distinguished from 'the mere absence of belief'. There is absence of belief even when we do not think of anything at all. In doubt, however, we think of two or more alternatives in regard to the same thing. Professor Bosanquet goes so far as to say that "a definite doubt is unquestionably a disjunctive judgment". But it is doubtful whether doubt as a wavering attitude of the mind can be regarded as a definite cognition or judgment at all. Rather, it is an indecisive questioning attitude of the mind towards an object. It is not a judgment at all. It does not assert anything definitely with regard to its object. When we are in doubt

about anything we do not know, nor do we claim to know, what it really is. We cannot even say that 'it must be either this or that'. All that we can say is: 'Is it this or that'? It is for this reason that doubt is neither true nor false, but only non-valid cognition. It is not valid because the oscillation of thought in doubt has no objective counterpart in reality. It is not false or invalid because it makes no definite assertion about its object and cannot, therefore, be contradicted by it. Hence as a form of wavering cognition it is to be regarded as logically neutral, i.e. neither true nor false.

While from the psychological standpoint knowledge is taken to mean any cognition of objects, from the logical it means true and only true cognitions of objects, attended with the conviction that they are true. In logic and so also in philosophy, knowledge is understood in a narrow sense and is limited to the definite and assured cognition of an object, which is also true. It is said that knowledge, in the strict sense, means a true belief that carries with it an assurance of its truth. As Bertrand Russell puts it, 'what we firmly believe, if it is true, is called *knowledge*'.¹ It follows that knowledge has at least two characteristics. It must be an *assured* cognition of, or a firm belief in something. It is thus distinguished from all indefinite, problematic and hypothetical cognitions. But knowledge is not merely a matter of subjective certainty. In illusion we firmly believe in what is false. Hence the second characteristic of knowledge is that it must be a *true* cognition of objects. A cognition is true when it agrees with or corresponds to its objects. That is, a cognition is true when it represents its object with that nature and character which really belong to it. Thus to know a thing is, strictly speaking, to cognise it as characterised by what

¹ Cf. *The Problems of Philosophy*, p. 217.

is a characteristic of it, with the conviction that it is so cognised. A man may have a true cognition of some thing without his knowing or believing that it is true. In that case, he cannot be said to have a knowledge of the thing. In addition to these two characters, some ^{are} philosophers admit some others as belonging to all knowledge in the proper sense. Thus some thinkers, like the Naiyāyikas, would say that knowledge is not only a matter of true and firm belief or cognition, but also a presentative or non-reproductive cognition (anubhava) of some object. According to them, true perception, inference, comparison (upamāna) and testimony (śabda) are the only four different kinds of knowledge in the logical sense. If there be other kinds of knowledge over and above these, we are to take it that they are either reducible to these four or not valid knowledge at all. Wrong perception, inference, etc. are obviously excluded from valid knowledge. So also are doubt, dream and memory. Doubt is not a form of valid knowledge because it is uncharacterisable as true or false. Probable opinion and hypothetical argument cannot be treated as knowledge because they do not give us certain information about things and events, although they may sometimes turn out to be true. Dream, like illusion, is not knowledge because it not only is, but must always be, false. The objects we dream of are perceived as present before our senses, while they are really past and distant. Dream must be a false cognition because it represents the not-present as the present, the 'that' as the 'this'. Sometimes dreams come true and are corroborated by the subsequent experiences of waking life. But even such correspondence between dream-cognitions and waking experiences is neither normal nor invariable. Memory, which is generally regarded as a true knowledge of the past, has been rejected by some Indian thinkers as non-valid

knowledge. The reason for this is that memory does not give us any direct or at least presentative knowledge of the past. Memory may be true or false according as it does or does not alter the order and character of the remembered objects. But even true memory cannot be regarded as knowledge in the strict sense, since it is not a presentation but a representation of past objects. Some other philosophers, like the Mīmāṃsakas, mention another characteristic of knowledge as logically understood. They maintain that knowledge must not only be a true and assured cognition, but also a new cognition. It must give us new information about the world of objects. Every case of knowledge, if it is to be of any value, should be original in character. It implies a new step, by which we advance from the known to what is not yet known. Real knowledge is a synthetic process adding new contents to the old stock of our knowledge of objects. If the objects are already known, there can be no necessity of acquiring a knowledge of them. Hence knowledge must relate to such objects as have not been previously known. It follows that memory cannot be true knowledge, in so far as it is not a new experience, but the reproduction of some old experience. Whether memory can or cannot be regarded as a form of knowledge in the strict sense is a question on which philosophers hold conflicting opinions. We shall not here enter into this question. But we may just say that memory lacks none of the characteristics of true knowledge mentioned here, and, as such, there is no reason why it should not be accepted as a form of knowledge in the logical sense.¹

Now we proceed to consider the more fundamental problem as to the metaphysical nature of knowledge. The

¹ For a full discussion on this point see the author's *The Nyāya Theory of Knowledge*, Chs. II and XX.

questions which arise here are: What is knowledge in itself? What is its status as a fact of reality? Is it an activity or a quality or a relation?

Many philosophers think that knowledge is an activity of some sort. Their view is known as *the act theory of knowledge*. It is not difficult to see what induced these thinkers to reduce knowledge to some kind of activity. There can be no knowledge unless the mind responds to the influences of the surrounding world. In the states of sleep and inattention we do not know any external objects, although these may act on our senses. If there is to be any knowledge, the mind must react to the actions of other things on it. Hence knowledge is a process in which the mind actively responds and reaches out to objects, and somehow illuminates them.

The act theory of knowledge has been accepted by various schools of philosophers. In Indian philosophy, the Bauddha and the Mīmāṃsā system uphold it. For the former, to exist is to act and so to change. Knowledge as an existent fact consists in the *conscious* act of showing and leading to an object. According to the Mīmāṃsaka, knowledge is a *mental* action (*kriyā*) which refers to an object. For Herbert Spencer, knowledge appears as an incident in the adaptation of the organism to the environment when tendencies towards action counteract one another and are thrown back on themselves so as to become *conscious* of their existence. Some voluntarists hold that cognition is the will when it is thwarted by difficulties and so looks for (i.e. *thinks*) means to overcome them. But in all these descriptions of the nature of knowledge there is some confusion, and what they give us is not the metaphysical nature of knowledge, although they propose to do so. To say with the Buddhists and the Mīmāṃsakas that knowledge is the conscious or mental act of showing or

leading or referring to an object, is to presuppose knowledge and not to explain it. For, what is known as a conscious or mental act is itself an object of knowledge and not knowledge in itself. Or, we may say that, for an act, to be conscious or mental is already to be a fact of knowledge, so that its reference to the object neither belongs to nor brings out its essence. Similarly, Spence and the voluntarists rather assume knowledge than explain it. For an organic tendency towards action to be simply counteracted and thrown back on itself is not to become conscious of its existence, unless by some trick consciousness is superadded to it or it has consciousness embedded in it. If it were so, then any tendency towards action, be it organic or not, would become conscious when somehow counteracted and hurled back on itself by a stronger force. When the voluntarists reduce cognition to a thwarted will, they forget that there may be cognition or thought even before the will is actually thwarted. Or, if the will cannot cognise or think before it is thwarted by difficulties, we do not see how it can, when so thwarted ; for a thwarted will is as much an unconscious activity as any other. As such, it cannot even know that it is thwarted by difficulties and so must look for means to overcome them. If, however, the unconscious will somehow knows these facts, we are to say that it is either favoured by chance or gifted by nature with the power of consciousness.

Some modern psychologists, known as the behaviourists, go further than the older empiricists and materialists and deny the reality of mind, consciousness or knowledge altogether. For them the human individual is, like the animal, a complex of body and behaviour. There is in him no mind or consciousness. He behaves in different ways in different situations of life. Some of these behaviours are called unconscious and automatic actions, while

others are called conscious and voluntary activities. But all of them are really behaviours or responses of the body to stimulations of different kinds. The difference between the conscious and the unconscious activity of a man is not due to the presence of any mental or conscious process of thought and deliberation in the one and its absence in the other. Rather, it is due to the fact that the one involves both implicit and explicit behaviour, while the other is only an explicit behaviour or overt bodily movement. Thus what is called 'action after deliberation' (which is another name for conscious or voluntary action) is an organic response which involves first implicit behaviour consisting of certain internal and imperceptible nervous processes in the vocal organ, and is then expressed by way of explicit behaviour or perceptible movements. Thought or consciousness is just the implicit behaviour of the body, located in the vocal organ and having the form of sub-vocal speech. Hence knowledge is a particular kind of behaviour in animals, or, as otherwise described, such response to the stimulus as has the characteristics of appropriateness and accuracy.

The behaviourist reform in psychology is more drastic than any other preceding it. While the older materialists treat mind or consciousness as an epiphenomenon or by-product of brain activity, the behaviourists deny the very existence of it and allow bodily behaviour to take its place. But this seems to be a logically indefensible position. Behaviour is as much an object of consciousness or knowledge as any other physical thing or event. That there is any behaviour, explicit or implicit, can be known only if there be a conscious mind or a knowing subject. To say that behaviour itself is consciousness or knowledge is to ignore the distinction between conscious and unconscious activity, for as behaviour they are the same and should be equally

conscious. If, however, we find that some behaviours are conscious and intelligent, while others are not, we are to say that they are more than mere behaviour. The consciousness that undoubtedly attends some of our behaviours cannot be explained by the interposition of internal and imperceptible movements in the vocal organ. That there are such internal movements may be true, but that bodily movements become conscious simply because they are internal is hardly true and intelligible. To suggest that there is no question of the movement becoming conscious, but that such movement is wrongly regarded as conscious, is not only to reject the evidence of our immediate experience but to make the origin of the idea of consciousness impossible. Hence the difference between conscious and unconscious activity is not simply a nominal one between implicit and explicit behaviour, but a real difference between that of which we are conscious and that of which we are not. If a behaviour *as such* were consciousness, there would be no distinction between behaviour and the consciousness of behaviour, because there is nothing more in the latter than what is contained in the former. But that there may be unconscious as well as conscious behaviour is the real basis of the behaviourist polemic against traditional psychology and idealistic philosophy. Hence we contend that knowledge or consciousness is left none the less unexplained by the more modern and subtle materialist called the behaviourist than it was by the older and cruder materialist.

Professor Alexander, the renowned British neo-realist, tells us that knowledge or experience is the simplest of all relations which may hold between any two objects. It is the compresence between the act of mind or the awareness and the object of which it is aware. There may be compresence between two physical objects, e.g. a tree and the

earth on which it stands. Or, there may be compresence between two mental acts as when I see a friend and hear his voice, and distinguish between the acts of seeing and hearing. Similarly, there may be a relation of compresence between a mind and some non-mental object, and it is here that ~~togetherness~~ or compresence takes the form of cognition or experience. It is difficult to say what exactly Alexander's view with regard to the nature of knowledge is. Apparently, he seems to think that knowledge or cognition means just the compresence between a mind and an external or non-mental object. This relation, he assures us, is nothing unique or peculiar to knowledge. It may hold between any two objects, physical or mental. But when it obtains between two physical objects, there is obviously no knowledge or cognition. So also when it holds between two mental acts, e.g. seeing and hearing a harmonium, there is no cognition or awareness of the one by the other. We cannot say that our visual experience of the harmonium cognises or is aware of the auditory experience of it, although it may certainly be said that *we* are aware of both. But if in every case, the relation of compresence be the same, we do not see why in some cases it does, and in others it does not, lead to cognition or knowledge. Of course, Alexander says that for every experience there must be compresence between the *act of mind* or the *awareness* and the object of which it is aware. But if there is an act of mind which is, forsooth, already the awareness of the object, we are to say that experience or knowledge is the mental act of awareness of an object and that its compresence with the latter is a redundant condition which may be discarded. The act of mind, Alexander tells us further, is experienced, although it be in a different way from that in which the object is experienced. The object is that *of* which *we* have experience, but the experiencing act

or awareness is aware of itself. To quote his own words, "My awareness and my being aware of it are identical."¹ To mark this distinction between the awareness of an object and that of awareness itself, Alexander rightly observes that the one is contemplated and the other enjoyed, that the mind enjoys itself and contemplates its object. If this be true, then we must admit that there may be experience or knowledge of mind or of mental acts even when there is no compresence between the mind and some non-mental object. Since 'my awareness and my being aware of it are identical' we have to say that experience or knowledge of some sort is present in 'the mental act or the awareness' even before it is compresent with any object. It seems, therefore, that Alexander's theory of cognition as compresence between 'the act of mind or the awareness and the object of which it is aware', does not explain knowledge; rather it assumes knowledge as inherent in the mental act or the awareness.

In the Italian school of neo-idealism as represented by Benedetto Croce and Giovanni Gentile, knowledge is said to be the function of the theoretical activity of mind, while will or volition is the function of its practical activity. Reality is a universal Mind or Spirit which creates alike itself and its environment. It assumes for us a variety of forms. The first form is that of knowing which Croce calls the theoretical activity and which he divides into two sub-grades, viz. intuition and conceptual thought. The second form is that of willing or acting which is called the practical activity and is divided into two subgrades, the economical and the ethical. Now while we can understand what practical activity or willing is like, we can hardly make clear to ourselves what the theoretical activity of mind is. Willing, we are told by Croce, is acting in the sense of

¹ Cf. *Space, Time and Deity*, V. I, p. 12.

producing actual movements of the body. A volition is not something which may or may not be followed by 'movements of the legs and arms; these movements are the volition'. Admitting that this is a true description of willing, what are we to say with regard to the nature of knowledge or knowing? It is said to be the function of the theoretical activity of mind. But then what is the nature of the theoretical activity which functions in knowing? It is not any kind of physical activity, force or motion. Nor is it of the form of willing as constituted by movements of the legs and arms. When we know anything we do not simply move our limbs or produce changes in the external world. Nor can knowing be said to be of the form of theoretical activity in any other sense. Croce admits that it is impossible to imagine an action which is not willed. If this be so, then all activities of the mind, the theoretical not excepted, must be of the nature of willing or of bodily actions. It follows that we must either deny the distinction between knowing and willing or say that knowing is not an activity at all. That the latter view is correct seems to be also indirectly admitted by Croce when he holds that 'the practical form of the mind's activity is logically dependent on the theoretical, since, although knowledge exists for the sake of action, we may know without willing or acting, whereas we cannot will or act without previously knowing'. This plainly means that knowledge is the ground of will or activity, but is not identical with it. In so far as this is true, we are to say that any description of knowledge as an activity is either a symbolic or an empirical description of its nature. Knowledge may be said to be an activity because of its analogy to other and real forms of action like the psychical (i.e. will) or the physical (i.e. mechanical motion). It is the *ground* of will or organic changes, just as physical motion is, of inorganic or mechanical changes

in the external world. But for that very reason it cannot be said to be *identical with* willing, activity or bodily movements. If, however, we propose to describe knowledge as an activity, what that really means is that we describe it in terms of what it does or in its relation to other things, i.e. we describe its empirical characters and not its essential nature.

The second theory with regard to the nature of knowledge is that it is a relation between certain entities. According to Meinong, the Austrian realist, and the Critical realists, knowledge is a relation among three terms, viz. a mind, an object, and a datum or content. When I know a table, my mind comes into relation with the physical object through the presented character-complex of table called datum or content. Some other realists, like C. D. Broad and G. E. Moore, hold that knowledge is a relation between two terms viz. a mind and any object. Professor Alexander, as we have already seen, analyses knowledge or cognition into a relation of compresence between the act of mind and the object. Bertrand Russell has, in his successive works,¹ reduced knowledge to a relation between three, two and one kind of terms. The one kind of terms, to a relation between which he finally seeks to reduce knowledge, is called "neutral entities" in so far as they are in themselves neither mental nor physical, although they give rise to both in different relations. According to the American neo-realists also, 'knowledge is not a relation between a knowing subject and a known object. It is merely a special sort of relation between objects'. Consciousness is, for them, not any distinct subjective or mental existence, but only 'a particular grouping of objects, defined by the specific response of the nervous system'.

¹ Cf. *The Problems of Philosophy, Our Knowledge of the External World, The Analysis of Mind.*

To know objects, therefore, is for the nervous system to make a specific response to their influence and make a separate collection of them from the environment. These modern realists seem to have been anticipated by William James who in his *Essays in Radical Empiricism* reduces knowledge directly to a relation between entities of one type.

According to him, knowledge can be easily explained as a particular sort of relation into which portions of 'pure experience' may enter. The relation itself is a part of 'pure experience', one of its terms becomes the subject or bearer of the knowledge, the knower, and the other becomes the object known. The neo-realists, however, go further than James and deny the reality of what he calls 'pure experience' and that of the subject of knowledge, and accept only the reality of objects.

The relation theory of knowledge also does not stand the test of criticism. If one closely examines this theory one would no doubt see that it is no improvement on the act theory of knowledge but is rather a different form of the latter. A thing's relation to another thing is, as we have already pointed out, but its action on that thing or the expression of its action on us. To be is not to be related. It is only when a thing acts and somehow affects another thing that we say that it is or how it is, related to the latter. Hence if we say that knowledge is a relation between a mind and an object, we have to admit that it is really the mind's activity directed on the object. But that knowledge is not and cannot be treated as an activity in the strict sense we have already made sufficiently clear. Assuming that knowledge is a relation and that relation is not necessarily action, we may ask, what are the terms of the relation? If it be, as some realists think it is, a relation between a mind or subject and an object, then we are to say that knowledge is presupposed in the subject and not produced by its

relation to the object. For, what after all is the mind or the subject but a conscious and intelligent principle which not only exists but somehow experiences or knows its existence. Of course, the pure consciousness or experience which abides in and constitutes the essence of the mind or the subject, may be further manifested by its relation to (i.e., action on) an object. But this would give us no knowledge in its essential or metaphysical nature, but in its empirical character with which we are not here concerned. It is in view of this that we say that when James explains knowledge as a particular sort of relation into which portions of 'pure experience' may enter, he really posits some sort of knowledge in that 'pure experience' and does not really explain it. Some modern realists, of course, go to the length of saying that knowledge is a relation, not between a mind and an object, but between objects themselves. But if this be true, we do not see why a relation between any two objects does not constitute knowledge. The relation between a table and the book resting on it should be as much a case of knowledge as any other relation between any other objects. Of course, the neo-realists would say with the behaviourists that knowledge is the relation between two objects, of which one must be the nervous system. But if the nervous system be as material and unconscious as the table, we cannot explain the appearance of consciousness out of its relation to an object any bit more clearly than we can, by the table's relation to a book. Even if it be granted that knowledge arises out of the relation between subject and object or that between two objects, a discerning critic would see that knowledge may arise out of a relation, but is not itself that relation. A relation as such is not a cognition but a cognitum, i.e. an object of cognition. Of course, when a thing is *known*, it enters into what we call the knowledge relation. But this

assumes the subject's awareness of the thing as the basis of the relation. So the relation cannot constitute knowledge. As L. A. Reid has said, "knowledge is not itself a relation, but the apprehension of relations". Supposing that knowledge is a relation, we ask: How do we know it? ~~It~~ must be through some other knowledge which ~~transcends~~ transcends the relation and is not identical with it. In fact, the subject-object relation does not produce knowledge but only serves to manifest it, just as the contact between light and a physical thing serves to manifest it but does not produce it.

The third view with regard to knowledge is that it is a quality. According to Descartes and his followers, thought or cognition is the essential attribute of the mind or the soul substance, just as extension is the essential attribute of matter. The Sāṅkhya and the Yoga system look upon knowledge or cognition as a modification of buddhi or the intellect which is its substratum. The Rāmānuja school of the Vedānta takes knowledge as an essential quality of the self. The self is not, as the Advaitins say, itself knowledge but is qualified by knowledge. Knowledge is not the essence of the self, but an attribute owned by the self. The Naiyāyikas and the Vaiśeṣikas also advocate the quality theory of knowledge. For them, knowledge is an attribute which inheres in the soul substance which, however, is separable from it.

But *the quality theory of knowledge* also involves certain difficulties. It cannot account for the reference to objects that is inherent in knowledge. A quality is an intransitive property of a thing. It hangs on the thing and does not point to anything beyond. It is in activity that we find a transition from one to an 'other'. For one thing, to act means aggressively to reach another. But at the same time we must not overlook the disinction between

the 'ideal reference' to object that we find in knowledge and any form of physical process or transeunt causality. Knowledge refers to its object and is in this sense a cognition of the object. It does not, however, move towards it. In it there is no transition from point to point in space. In so far as this is the case, the Nyāya is right in opposing the attempt to identify knowledge with activity. But the view of knowledge as a quality misses the other fact of objective reference that we find in knowledge. Knowledge seems to be what Reid calls 'a self-transitive process'. Its self-transcension is, as Hoernle points out, directly experienced by us.¹ So it seems to occupy a position intermediate between quality and activity. To describe its self-transcension or objective reference and, at the same time, demarcate it from physical activity, we may say that knowledge is an 'ideal or theoretical activity'. But after all, the characterisation of knowledge as an activity, be it physical or ideal or theoretical, is only a symbolic description. While physical activity is real and intelligible, an 'ideal or theoretical activity' can hardly be made intelligible to us. Knowledge is, therefore, neither a quality, nor an activity nor a relation.

In conclusion let us state our views with regard to the metaphysical nature of knowledge. While knowledge in its empirical character may be said to be the manifestation or apprehension of objects, in its metaphysical character, i.e. as a thing in itself, it is a self-manifest and self-conscious reality. The one thing of whose reality we are definitely assured is our experience or thought. This experience not only *is* or exists but is also conscious of its existence. By knowledge we mean just this kind of self-conscious experience which may not experience any object, but still *is* and experiences itself. We may call it mind or self, if

¹ Cf. L. A. Reid, *Knowledge and Truth*, p. 188.

by that we do not mean any thing or substance, quality, action or relation, but a reality in which being means knowing, and of which thought and existence are inseparable and almost indistinguishable aspects. What we generally call the mind is only a complex of bodily and mental functions. Similarly, the self, as it is understood and explained by common sense, science and some philosophic systems, is not the real self, but a hybrid of mind-body or the empirical self as a series or stream of consciousness. But underlying the body and the senses, the mind and the intellect as well as their functions there is in us an abiding and unchanging principle of consciousness which inspires and enlivens them and yet transcends them all. The real self is this living consciousness, for which to *be* means to be conscious. With regard to the self, we cannot say that '*it* is conscious', or '*it* is conscious of *that*', for here both '*it*' and '*that*' stand just for consciousness. As such, the self is no other than knowledge in its metaphysical character. If this be true, then knowledge may also be said to be the ultimate reality, of which we are immediately aware, since the self in us is the most indubitable fact and the presupposition of all other facts. Take away the self of a man, and see how for him the whole world of objects crumbles and is *non est*. That there may be or is knowledge in the sense explained here is not generally admitted by us either because we cannot realise the 'pure experience' which is neither subject nor object, i.e. an experience which is not the experience of an object by some subject, or because our language fails to explain it without bringing it under the subject-object relation. This is possibly the reason why even an idealist like Rāmānuja doubts and denies the reality of 'pure consciousness'. But that we are somehow in possession of this rare experience is implied by all our thoughts, deeds and experiences. But for the reality of a

transcendent consciousness, these could not be known and owned by us as *our* thoughts, deeds and experiences. We may also point out how some Western idealists make a close approach to the conception of knowledge as self or the ultimate reality. "Knowledge" says Bernard Bosanquet,¹ "is an essential form of the self-revelation of the universe; experience as a whole is the essential form". We have it from Hegel that thought is a living concrete reality and that behind the immediate thought or experience of which we are aware, transcending it and yet immanent in it, there is a total concrete unity of thought which makes our individual experience real and intelligible. For Croce and Gentile mind or experience is the only thing which possesses reality; in fact reality is experience or mind or spirit.

¹ Cf. *Logic*, V. II, p. 322.

CHAPTER V

THE RELATION OF KNOWLEDGE TO OBJECT

Taking knowledge in the empirical sense as a cognition of objects we shall discuss in this chapter some old and modern realistic theories of the relation between knowledge and its object. This relation is in one sense the best known of all relations, but in another sense it is the least known. It may be thought by some that the relation of knowledge to object is the simplest of all relations between objects or between minds and external things. We may not always easily understand how things act upon one another or how they interact with minds. But we seem to feel no difficulty in understanding how they are related to our knowledge. For a thing, to become related to knowledge is just to be known by us. When we know anything as it is, we say that it stands related to our knowledge or it enters into the knowledge relation.

For common sense and some philosophic systems, knowledge is a direct revelation of objects. According to the theory of *naïve realism*, objects exist independently of all knowledge. The existence of things does not in any way depend on their being known by the mind. Things exist with all their qualities even when no mind knows them. Although things possess an independent existence of their own, we have in knowledge a direct consciousness of them. The objects of knowledge are directly presented to consciousness and are precisely what they appear to be. Knowledge or consciousness is like a beam of light which illuminates the world of objects and enables us to apprehend things as they really are. But the faith of the naïve or natural realist is shaken by some rude facts.

If all knowledge be a direct presentation of objects as they really are, what are we to say with regard to the objects of dream, illusion and hallucination? These cannot be said to exist as real things 'out there' in the real world. Rather, they seem to be ideas or images of the mind which are wrongly taken for external objects. It is, therefore, possible for us to have experiences which do not directly reveal any real object.

These considerations have led some philosophers like Locke to introduce the theory of *epistemological dualism*. According to this, the mind never directly perceives anything external to itself. What it knows directly are its own states and processes—sensations, perceptions, images, ideas, etc. But from certain experiences of the mind we can infer the existence of external objects as their causes. On this view, therefore, knowledge is not a direct presentation of objects, but a representation of them through the images and ideas which they produce in the mind. Our mind is like a mirror which reflects external objects in it and thereby gives us copies of things, but not the things themselves. Although this theory of representationism helps us to get over some of the difficulties of natural realism, yet it creates fresh difficulties for itself. While the fact of error may be partially explained by it as a wrong representation of real objects, it fails to prove the existence of any external reality. If the mind is to infer the existence of external objects from certain characters of our experiences, then it must have somehow and somewhere a direct cognition of some external object as related to those characters. But for the direct experience of an external object, the idea of external reality would not at all arise in our mind. To one unacquainted with an external object, ideas of the mind would not appear to be copies of external things, just as a photograph cannot be recognised as the

photo of a particular person by one who is not acquainted with him. Thus we see that neither the theory of natural realism nor that of epistemological dualism can satisfactorily explain the relation between knowledge and its object and that it raises a real problem which does not admit of an easy solution.

In the modern schools of realism fresh attempts have been made to tackle the above problem. Modern realists are united in their opposition to idealism, although they differ among themselves with regard to their theory of knowledge. They emphatically declare that idealism in any form—Berkeleyan, Hegelian or otherwise—suffers from an inherent incapacity to explain the independent existence of the world of objects, so clearly testified to by experience. Further, it logically leads to subjectivism and ends in solipsism. That the objects of knowledge exist independently of the knowing mind is the undeniable verdict of all unsophisticated experience. The only other question that we are to consider seriously is: How is knowledge related to the known object which exists independently of it? The answer given to this question by the American neo-realists is in principle the same as that of the natural realist. It may even be said that *neo-realism* is, generally speaking, a revival of the old theory of natural realism and an attempt to remedy its defects. It is a *theory of direct realism* which unreservedly accepts the doctrine of presentationism to solve the problems of knowledge. For it, knowledge has a direct relation to its object. 'The content of knowledge is numerically identical with the thing known. Things when consciousness is had of them become themselves contents of consciousness; and the same things thus figure both in the external world and in the manifold which introspection reveals.'¹ Knowledge or consciousness may

¹ Cf. *The New Realism*, pp. 34-35.

thus be said to be constituted by its objects, and we need not admit the existence of mind or consciousness as a reality distinct from objects. What we call consciousness is not any distinct subjective existence, but only a particular grouping of objects, defined by the specific response of the nervous system. Thus Holt defines consciousness as the 'cross-section of the universe, selected by the specific response of the nervous system.' Just as a searchlight, by playing over a landscape and illuminating now this object and now that, defines a new collection of objects, so the specific response of the organism, equipped with a central nervous system, makes a definite collection of objects from the environment. Consciousness is the cross-section or collection of objects defined by the specific response of the organism.¹ It follows that when we know anything what we directly get is not a mental content which refers to the thing, but just the thing itself in its real characters. It may be that sometimes contrary and even contradictory characters are perceived in the same thing by different persons or by the same person at different times. This, however, presents no serious difficulty to the neo-realist who holds that the same thing may have contrary and even contradictory characters. This is clearly shown by innumerable instances of objective contradiction among the forces and laws of nature. In dream, illusion and hallucination we have experience of certain objects which are unreal and false, and are contradicted by true knowledge. But for that we should not say that these objects are subjective and dependent on the experiencing mind. Even these objects *are* and possess being or subsistence. 'Everything that is, is and is as it is.' The unreal and the illusory are not subjective fictions of the mind.

¹ Vide *The New Realism*, pp. 353-54; *The Concept of Consciousness*, pp. 181-82.

They are as objective and independent of experience as real objects of the world. The distinction between the real and the unreal is that while the former not only *is* but also exists in real space and time, the latter only *is* and does not exist in real space-time. The unreal, therefore, subsists and does ~~not~~ exist. Nevertheless, it is not mental or subjective; it subsists in its own right in the all-inclusive universe of being, and its subsistence is not a status conferred on it by any mind. It follows that in illusory experience the same thing will have to be credited with contradictory characters like the real and the unreal. To see silver in a shell is to apprehend an unreal character which contradicts the real character of a thing. But how can contradictory characters both have being in the same thing? To this the neo-realists reply that the case of illusion and the like is paralleled by that of mirrored space. In any mirrored space we see how sundry mirrored objects occupy the same spatial positions as are occupied by other 'real' objects situated behind the mirror. Similarly, the solid sphere, seen by looking at two flat disks through a stereoscope, is neither a genuine occupant of the physical world nor a purely subjective product. It is a subsistent object which is unreal but not subjective or mental. So with all other illusory objects. By putting them in the realm of being or subsistence the neo-realists grant them an objective status and at the same time distinguish them from real and existent objects.¹

It will appear from the brief account given above that the American neo-realists adhere to the old theory of natural realism in so far as they hold that knowledge is directly related to its object and that all objects of knowledge are independent of the knowing mind. In their anxiety to ensure the independence of objects some of them reduce

¹ *Vide The New Realism*, pp. 358-70.

knowledge or consciousness to the collection of objects defined by the specific response of the nervous organism. Even the objects of erroneous experience like illusion are held to be as objective as real things, although they do not, like the latter, exist but only subsist. The distinction between the existent and the subsistent is the neo-realist's special contribution to old realism, which is calculated to meet the objections usually brought against it. If all that is experienced is objective and belongs to real things, we have to explain how contrary characters like red and green, or contradictory ones like the real and the unreal can belong to the same thing as they seem to do in actual experience. The neo-realist explanation is that contrary or contradictory characters belong to the same thing in the same way in which opposite forces are held in equilibrium or mirrored objects are in the same space with other real objects. But it is doubtful if the neo-realist theory is really more satisfactory than the old theory of natural realism. In its attempt to overcome the difficulties of the old theory it makes certain assumptions which in effect entangle it in the same or perhaps greater difficulties. If 'everything that is, is and is as it is,' we have to admit that the same thing is both red and green at the same time, since it may be perceived to be such by different perceivers. That a thing may be red and green at different parts of it we can easily understand. And that the same part of it may be *seen* as red and green by different persons in different bodily conditions is also intelligible to us only if we grant that the perceived colours are relative to the sensibility of the perceivers. But that such contrary characters belong to the thing itself independently of the perceiving minds is something which we can hardly understand. The instances of objective contradiction cited by the neo-realist do not really prove the co-presence of opposite characters in the

same thing. When two equally strong forces act on a body from opposite directions and keep it at rest, we cannot say that it actually moves up and down at the same time. What happens is that the opposed forces neutralise each other and leave the body in a state of rest. We do not see how under such circumstances the same thing may be said to have two contradictory or even contrary characters. The neo-realist's invention of the world of subsistents to secure the independence of illusory objects appears to be a makeshift which does not really serve its purpose. What we have to explain in sensory illusion is the perception of an unreal character in a thing, which appears as an *existent physical* character of it. This, however, cannot be explained by the fabrication of any *subsistent* characters which are *non-existent* and *non-physical*. The example of mirrored objects, which are said to occupy the same spatial positions with other real objects behind the mirror, does not really support the neo-realist's case. Mirrored objects are none other than the physical objects reflected in the mirror. They are not separate entities which occupy the space of the mirror. If they were really so, they must be physical and not etherial like the neo-realist's subsistents. Further, if all the characters perceived by any knower really belong to the things known, there can be no reason for our treating any knowledge as erroneous. Rather, we will have to admit that illusion is as good as any true perception and that we are wrong in supposing illusion to be illusory. Finally, the neo-realist's attempt to explain consciousness as a cross-section of the universe is as futile as it is absurd. If consciousness be but a collection of objects made by the specific response of the nervous system, it should appear as 'out there' in the external world and not as within the organism. In truth, however, consciousness cannot be such a collection of objects. The organism may specifically

respond to different objects at different times. But to become *conscious* of any of these objects or of a collection of them all, it must be either endowed with mental qualities or intimately connected with the mind. Instead of saying that consciousness is a collection of objects, we should say that any collection of objects requires a ~~conscious~~ mind. The craze for objectivity in all matters, which is so characteristic of American neo-realism, has perhaps laid it open to more serious charges than the common-sense realism of old.¹

In *critical realism*, which is another important school of modern realism, the problem of the relation between knowledge and its object is approached neither from the objective standpoint of natural realism nor from the subjective standpoint of dualistic realism. According to it, the data of knowledge, or what are directly given in experience, are not the objects or the qualities of objects as is held by the natural and the new realists. Nor are they ideas or other states of the mind as the dualistic realists suppose. On the other hand, they are certain character-complexes, essences or logical entities which are irresistibly taken to be the characters of existent objects. These data do not *exist* like the physical objects to which they are referred or like the mental states to which they are presented. While both physical things and mental states have existence in space and time, the data of knowledge are logical entities which have no such existence. A thing seen by me exists in space and time, and bears certain spatio-temporal relations to other things. But the visual datum which brings it before me is neither here nor there, and it has no spatial or temporal relations to other visual data. In any knowledge there are three factors, namely, a mental state, a datum and an object. Neo-realism is involved in certain

¹ Cf. *Essays in Critical Realism*.

grave difficulties because it ignores the distinction between the object which is known, the datum through which it is known, and the mental state or mind by which it is known. It makes an attempt to explain all knowledge in terms only of objects and, therefore, fails to solve the problems of relativity and error in knowledge. Consciousness cannot be reduced to a relation among objects. The appearance of the data of knowledge cannot be explained merely by the specific response of the brain or the nervous system to the influence of physical objects. Brain-states cannot account for the *cognition* of objects unless we admit the existence of mental states distinct from them. But not only are mental states distinct from objects; the data of knowledge also must be recognised as distinct from either. A datum of experience neither exists in space and time, nor has it any causal efficacy like mental states and physical objects. Again, mental states have not the characteristics of a datum. We may have a perceptual datum like "a round-table-about-three-feet-high," but the implied mental state is neither round nor about three feet in height. But if the data of knowledge are neither mental nor physical, how is it that they appear as 'out there' in space? The critical realists would say that they are so imagined by the mind. The data of perception, for example, appear when the organism (*i.e.*, the mind-body) is affected by a physical object and imagines them as characters of the object in those vivid ways which we call "seeing", "feeling", etc. All knowledge of objects is mediated by the appearance of some data, perceptual or otherwise. This, however, does not mean that what we know are not the objects, but only our ideas about them. Just as I know an absent friend immediately through my thought of him, so we know objects directly through the data by which they are presented. The data are the means by which we know

objects in the same way in which the senses are the means of perceiving physical things. No one touches a thing indirectly because he has to touch it with his hand. Similarly, the objects of knowledge are not indirectly known simply because we have to know them through some data. In true knowledge the data are either the characters of objects or produced by certain characteristics in them. In error, on the other hand, the data do not correspond to the real characteristics of the object. Thus knowledge will be true if it asserts the object to be constituted as it really is, otherwise it becomes erroneous. And the truth or falsity of knowledge is tested by the common methods of experience and reasoning which are regularly used by scientists, historians, judges and business men. That there is an independent world of objects transcending experience, we cannot, of course, logically prove. It is a matter of instinctive belief with us. But although we cannot demonstrate its existence, we can at least pragmatically justify our belief in it. We feel instinctively that the data of experience or appearances are the characters of real things and react to them accordingly, and we find that this belief works in life.¹

It will be observed here that critical realism differs from neo-realism on certain fundamental points. Unlike the latter, it holds that knowledge is a relation between mind and external objects mediated through certain data or given appearances. It is not, as some neo-realists hold, a relation between the brain or the nervous system and some independent object. It holds also that knowledge is not directly related to the thing known in the sense that the data of knowledge are actual portions or qualities of the thing itself. The data, or what we directly get when we know anything, are certain character-complexes or logical essences which are not identical with, but may also be, the

¹ *Vide Essays in Critical Realism*, pp. 3-32, 85-113.

characters of the thing known. In the case of secondary qualities, however, the data of knowledge cannot be the characters of things. But the hypothesis of character-complexes interposed between the knowing mind and the known thing constitutes at once the strength and the weakness of critical realism. This makes it allied to the position ofistemological dualism with its concomitant doctrine of representationism or the 'copy theory of ideas.' While it may help the critical realist to explain the facts of error and illusion, it seriously handicaps him in the attempt to explain the true knowledge of things. The character-complexes are logical universals, while the things are spatial or temporal particulars. If this be so, we do not see how any character-complex can also be a character of the thing. If the character-complexes are to be also the characters of things, they must somehow be spatio-temporal entities which, *ex hypothesi*, they are not. Hence our knowledge of things cannot but be indirect and representative in character. What things are we can never directly know. We must always know them through the data or character-complexes which appear immediately before our mind. But in the absence of a direct knowledge of things at some point, we cannot even be sure that any knowledge truly represents any thing or that there is any independent world of things at all. In fact, the critical realist also admits that the existence of the independent world of objects is only pragmatically justifiable, but not logically deducible from the character-complexes given in experience. He, however, makes an inconsistent compromise with realism and leaves the world of things on an insecure basis of instinctive faith. It would have been perhaps more consistent for him to say that the world of objects is a construction of the mind from certain given experiences and with a view to meeting the needs of our

practical life. He virtually admits the basic principles of such a view of the world when he says that the data of knowledge (which do not exist) appear 'out there' in space because they are so *imagined* by the mind and that the truth of knowledge is to be tested by the harmony of different experiences, and finally refuses to ~~rule~~ any theory with regard to the ultimate nature of reality.

✓ Among British neo-realists Samuel Alexander formulated a theory of knowledge which occupies an intermediate position between American neo-realism on the one hand, and critical realism on the other. It agrees with the former in holding that knowledge is directly related to its object, but differs from it in according distinct reality to mind or consciousness. And while it agrees with critical realism with regard to the reality of mind, it does not accept the critical realist's hypothesis of character-complexes as the necessary data of all knowledge. For Alexander, knowledge or cognition is not a unique relation, but an instance of the simplest and most universal of all relations. Knowledge is just the compresence between mind and an external object. Any knowledge may be analysed into two terms and their relation to one another. The terms are the act of mind or the awareness and the object of which it is aware; and the relation between them is that they are together or compresent in the world of experience.¹ The object of knowledge is independent of the mind. It is true that the object cannot be known without a mind to know it. But from this we should not conclude that objects are dependent on the mind for their existence. What objects owe to mind is their being known, and not their being existent facts. The colour, pressure and other qualities of a thing are so many objects which exist in their native character in the thing itself independently of their being known

¹ *Vide Space, Time and Deity*, V. I, p. 11; V. II, p. 82.

by us. A thing is a synthesis of all the objects or appearances which it presents to the experiencing mind. But neither the objects nor their synthesis is made by the mind; rather they are found in the thing itself. A thing is in itself a portion of Space-Time with a certain configuration and a plan of combination of its constituent motions.

For our experience it is a synthesis of appearances or a whole of presentations to the mind. There are real appearances, mere appearances as well as illusory appearances.

✓ Real appearances are parts or partial revelations of the thing to the mind, and they belong to the thing itself. These may vary according to the different positions of the same or of different observers. ✓ Mere appearances are those which do not belong to the thing itself, but arise from its connection with other things. ✓ Illusory appearances are due neither to the thing nor to its relation to other things, but to the mind which introduces new objects into the thing. All kinds of appearances are, as appearance, on the same level; but while real and mere appearances belong to the things apprehended, illusory appearances do not belong to them.¹ Hence it is that we have error and illusion. One idea or belief is true when it is confirmed by the coherent body of standard beliefs and ideas established by social intercourse, while ideas which are incoherent with true ideas are false or erroneous. But the distinction between coherence and incoherence is ultimately determined by reality itself. It is by experience of reality and experiment on it that we distinguish between one group of ideas as true and the other as false. Thus truth and error are products of the social mind under the guidance of reality.²

Alexander's theory of the relation between knowledge and its object seems to combine two incompatible lines of

¹ *Op. cit.*, V. II, pp. 105-6, 183f., 211f.

² *Op. cit.*, V. II, pp. 251f.

thought. Sometimes he would frankly believe with the natural realist that knowledge is directly related to the thing known and apprehends its real characters. But in the actual working out of his theory he lapses at certain points into a sort of representationism which brings it nearer to critical realism. A thing, he tells us, is in itself a complexity of motions occupying a portion of Space-Time. The colour, pressure and other qualities of a thing are its appearances to the mind. These are called real appearances as distinguished from others which appear through its relation to other things and are therefore described as mere appearances. In addition to these two, there is a third kind of appearance which is said to be due to the mind and is therefore branded as illusory. But if knowledge be simply the compresence of the mind with the thing known and an awareness of it in its real characters, we do not see how anything but motions should have been perceived. The compresence of my face with a mirror (held before it) would give just an image of the face as it is. If there be any difference between the face and its image, then that must be accounted for by the mirror. Similarly, if the complexity of motions puts on such appearances as colour, touch, etc., in its relation to the mind, we are to say that the mind is not passively compresent with, but makes certain contributions to, the complexity of motions in order to constitute the concrete object of knowledge. Alexander concedes this point partially when he says that even the real appearance of a thing may vary relatively to the position of the observer. If it be held that the varying real appearances belong to the thing independently of the mind, we have to admit that a thing may have contrary and even contradictory characters, which we have already seen to be logically indefensible. Further, when Alexander speaks of a thing as a *synthesis* of all its appearances to the mind,

it is implied that the thing is a construction of the mind on the basis of certain given presentations. A synthesis of different experiences to constitute one thing can hardly be explained by anything but the synthetic activity of the experiencing mind. In the case of illusory appearances it is explicitly ~~admitted~~ admitted by Alexander that they are due to the induction of foreign characters into a thing by the mind. This, however, does not accord very well with his other view that a thing is a synthesis of *all* its appearances and that the synthesis is not made but discovered by the mind. To be consistent with his general position in philosophy he should say that the objects of knowledge are constructed by the mind out of certain sensations produced by different kinds of motions in Space and Time. This will be more in harmony with his account of truth and error as products of the social mind. If all objects of knowledge are regarded as syntheses of experiences brought about by the mind, we can understand how knowledge will be true when it coheres with established social ideas and beliefs, and how otherwise it will become erroneous. If, however, objects somehow are as they appear, independently of our mind, it must be correspondence to the object and not the coherence of experiences that is to determine the truth or falsity of knowledge./

We are thus led to a view of the relation between knowledge and its objects, which is different from the realistic theories discussed above. For us knowledge is not constituted by its objects in the sense that one object like the table is known when it is related to another object like the brain or the nervous system. Knowledge implies the relation of an object to some mind which is distinct from it. The relation between the two is not mediated by any data like the critical realist's character-complexes which may or may not be the characters of the thing known. There is

actually no evidence for the appearance of such logical essences in between the knowing mind and the known thing. Rather, we should say that the data which appear before the mind are the constituents of the thing as known. Knowledge may thus be said to be directly related to its object. This, however, does not mean that in knowledge the mind is passively compresent with and aware of objects which possess the presented data independently of their relation to mind. On the other hand, we maintain that the data or appearances owe it to the mind that they are parts or constituents of the known object. An object like the orange is constituted by certain visual, tactual and other data, so related among themselves as to make a definite whole. We may also say that the orange is a synthesis, in a particular form, of certain visual, tactual and other qualities. But apart from relation to some mind like ours there would be no synthesis of these sensible qualities so as to constitute one object called orange. Visual, tactual or other qualities, taken in isolation, are unmeaning and inarticulate sensations which stand for no actual object of knowledge. The objects we know are not such blind sensations, taken severally or collectively. On the other hand, they are definite wholes of parts or significant syntheses of certain presentations. Hence we say that an object is a construction of the mind conditioned by certain sense impressions. The objects of knowledge are not mere sensations, but what the mind *means* by its sensations. Sometimes we see faces on a distant wall where there are a few irregular pencil marks. All of us enjoy the beauty of the landscape exhibited by the cinematograph. These cases fairly illustrate the way in which the mind can construct objects out of given presentations by imputing certain meanings to them. But the distinction between real objects on the one hand and unreal or illusory objects on the other,

is that while in the former the meanings are, for reasons we shall explain in the next chapter, universal and necessary, in the latter they are peculiar to the individual himself or to the society in which he lives. Thus knowledge will be true or false according as its objects are real or unreal in this sense. All objects of knowledge, however, are constructed ~~by~~ by the mind in some sense or other. We conclude, therefore, that knowledge is not, as the neo-realist would say, constituted by its object, but that the object is constituted by the knowing of it.

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CHAPTER VI

OBJECTS OF KNOWLEDGE AS CONSTRUCTIONS

In the preceding chapter we made an attempt to show that although knowledge may be regarded as directly related to its objects, yet the latter are in some sense or other constructed by the knowing subject. But while this view may be accepted in the case of imaginary or illusory objects, it has hardly any chance of acceptance in the case of what are commonly called real objects. An imaginary or illusory object may be said to be constructed or even produced by the mind of the subject who knows it. But it will be said here that to cognise the false or the unreal is not to *know* anything, rather it is to lack the knowledge of some real thing. To know is to cognise a real object and be also assured that it is real. The function of knowledge in relation to the object is revelatory and not constructive or creative. To know is to reveal or manifest a real object and not to construct it in any way. If, therefore, the object of knowledge be regarded as constructed by the knowing subject, the distinction between the real and the unreal cannot be maintained, and the universality and necessity of our knowledge of objects cannot be explained. When I perceive a red rose I do not seem to construct it at the moment of knowing it; rather I feel that a real object stands revealed before me and that, under similar circumstances, it will so reveal itself to all other persons. How then are we to explain the universality and necessity of our knowledge of objects consistently with the view that they are constructed by the knowing mind? In this chapter we have to consider this question.

In an epistemological enquiry like the present one we propose to take knowledge in the ordinary sense as a

relation between subject and object. But the subject-object relation into which knowledge is usually analysed is not ultimate. While the idealists take knowledge as a relation between subject and object, the neo-realists treat it as a special kind of relation among objects. Both, however, fail to see that the ultimate condition of knowledge is the self ~~as~~ related to an "other". In every case of ordinary knowledge the individual self is confronted by a real which stands as an "other" over against it. To know is, for one self, to experience an "other". The self as knowing is the subject of knowledge and the "other" as manifested to the self is the object of knowledge. The "other" or the real that confronts the self is not known as such or as a thing-in-itself. Strictly speaking, the real cannot be described even as a thing-in-itself, for a "thing", as ordinarily understood, is not the real as such but as construed by the knowing subject. Hence what we know, when we know anything, is a manifestation of the real as some object or thing. The object of knowledge is not the real as such but a manifestation of the real as conditioned by the self's relation to it. The manifestation owes it to the constructive activity of the knowing subject that it becomes an object. Let us see how.

What we commonly call an object of knowledge is a spatio-temporal particular possessing some qualities. It is a thing which has qualities and exists in time and space. The object of knowledge is thus a thing which exists in the spatio-temporal world. Now the question is: How do we get an object as an existent particular in space-time? Is the object like a red rose given to us as an independent real thing in the world of space and time? Both common sense and realistic systems hold that it is so given and exists as a real independently of all experience. But a critical examination of the object shows that it is

neither absolutely given nor independently real. If the red rose as an object were an independent real and all its characters were absolutely given, then we have to say that it possesses all the contrary and contradictory qualities that are perceived in it by different perceivers. Or, we have to say that all the perceived characters of an object are not its real given characters. But, then, we should give up the view that the object is an independent real which is completely given in experience.

Taking any object of knowledge like a rose or an orange we find that it may be analysed into three kinds of elements, viz., the material, the formal and the verbal. The first consists of the actual and possible data that compose the object. The data are the *sensa* which are presented to the mind by the activity of a real outside the mind. They are not absolutely given in the sense that there would be data independently of the psychical and physiological conditions of experience. Their appearance as data is conditioned by the healthy working and normal development of the psycho-physical organism concerned in experience. What is really given in experience is the "other" to which every experience refers independently of all other considerations. The "other" is the real which acts on the mind and manifests the data relatively to the capacity and competency of the mind concerned in experience.

But sense-data do not by themselves constitute an object of knowledge. An orange, for example, is not a collection of certain visual, tactual and other data. It is rather a thing which has certain specific qualities and a general nature which it shares in common with other oranges. The visual and other sense-data represent the specific qualities of the orange. But how is it that a patch of yellow-red becomes the colour, or a tactual impression the touch-quality of an orange? How, again, is it that an

orange has a general nature like "orangeness" in which all oranges participate. That there may be a universal like "orangeness" in an orange we do not deny. All that we contend is that while an orange may have "orangeness" in it, a collection of sense-data cannot have any such universal in them. ~~For~~ a collection of sense-data to become a thing, ~~we~~ have to introduce the formal relation of substance and quality, and treat sense-data as qualities of a substance. It is only when we have a thing as a substance with qualities that we can speak of a general nature or a universal characterising it in some sense.

The object of knowledge, we have said, is a spatio-temporal existent. But how is it that we know the object to exist in space and time? That we have spatial and temporal senses like the visual and the tactual, is highly improbable. It may be said that although there are no space-time sense, yet spatial and temporal characters belong to visual and tactual *sensa*, and these constitute the data of our knowledge of space and time. But it should be observed here that spatial and temporal characters do not explain but presuppose space and time. To understand a spatial or temporal character is to know already what space or time is. Further, what exist in space and time are not *sensa* as such, but things as substances outside and succeeding one another. Spatial and temporal characters belong primarily to things and secondarily to *sensa* taken as qualities of things. Thus we see that space and time are not parts of the given data of experience, but forms of order under which we bring objects apprehended as things or substances with qualities. Space is the condition for the existence of things that are apprehended as separate from one another. To apprehend one thing as separate is to apprehend it as occupying space. Time is the condition of the order of succession

among different things or different states of the same thing. To apprehend one thing or state as coming before or after another is to apprehend it as being in time. The objects of knowledge are thus found to be constituted by certain formal elements which make sense-data, unmeaning by themselves, significant ~~as~~-qualities of things.

But the object of knowledge is not fully explained by reference to sense-data and certain forms of relation like substance-quality, space and time. There are certain verbal elements which play an equally important part in the constitution of the object. At the present state of our knowledge we cannot think of anything except through some word. The intimate relation between thought and language is now a commonplace of psychology. All objects of thought are bound up with the words by which they are denoted. The structure of the objects of knowledge like chairs, tables, books, etc. would not be such unless they were associated with their respective names. To a baby who has not yet learnt to speak or to use these names there would be no such things as chairs, tables and books. If no names were invented for the different kinds of golden ornaments and if there were no such word as "ornament", then the objects which we now know as bracelets or necklaces would be but gold, just as all stones on the roadside are only stones, although they may have different sizes and shapes. The objects of knowledge are substances which are related to certain qualities. An object like the jar is said to be a substance which has colour, touch, etc. as its qualities. The relation of substance and quality is a formal element in the constitution of the object. The basis of the formal relation of substance and quality is the grammatical relation of subject and predicate. The grammatical subject is that which

is or does something, while the predicate is what is said of the subject. It is on the basis of this grammatical distinction that the logical relation of substance and quality has been developed. It is not unlikely that the subject-object relation in philosophy which is held by many to be ultimate for knowledge is itself a development from the grammatical relation of subject and predicate. That knowledge is an activity of some kind is perhaps the oldest and most widely accepted view of it. But if to know is somehow to act, there must be a subject which acts and an object in relation to which it acts. The self that knows thus becomes the subject and the things known become its objects. With the development of language the old conception of the self as a substance with the quality of consciousness is replaced by the idea of it as the subject of the act of knowing. It would thus appear that verbal elements enter into the constitution of the object of knowledge as much as formal and sensuous ones.

If the foregoing analysis of what is commonly called an object of knowledge be correct, we have to accept the conclusion that it is a construction of the knowing mind on the basis of certain sense-data. An object like the jar exists as a thing before me because my mind is related to an "other" or real which presents some visual and tactual data and because it construes the sense-data as qualities of a substance occupying space-time and bearing the name "jar". But here the question arises: If the jar is constructed by my mind, how is it that all persons perceive the same jar? In other words, the question is: How are we to explain the universal and necessary character of our knowledge of objects on the construction theory?

In reply we should say first that there is no inherent contradiction between construction on the one hand, and

universality and necessity on the other. To be constructed is not necessarily to be subjective as, contrariwise, to be unconstructed is not necessarily to be universal and necessary. Some modern logicians regard *classes* as logical constructions in the sense that they are not things which we can perceive by our senses but the means by which we think about things we perceive or imagine, and that normal thought in employing logical or rational procedure uses classes. But for that they are not treated as subjective fictions. "There is nothing *fictitious* about a logical construction. To say that *tables* are logical constructions is not to say that *tables* are fictitious, or imaginary, or in any way unreal".¹ The meaning of a sentence is said to be a construction of the separate meanings of its constituent words. Still, the sentence bears a meaning which is the same for all persons who understand the language in which it is expressed. On the other hand, the pain of toothache as felt by one man seems to be given *par excellence* and not constructed. But for that we cannot say that it is a universal and necessary experience for all persons. Secondly, we should point out that the sense-data that are given to different individuals by what is commonly called the same thing are not exactly the same for them all. It is all but certain that the data of sense are slightly different for the different perceivers, according to their different positions and powers of sensibility. Nevertheless, the different individuals perceive the same thing, because they construe the sense-data in fundamentally the same way and because the thing serves the same practical needs.

In the construction of the object, as we have already seen, there are certain material, formal and verbal elements. The material elements are the data given to

¹ Vide L. S. Stebbing, *A Modern Introduction to Logic*, p. 158.

the individual subject through his senses by the action of an "other" or real. The sense-data are relatively the same for all individuals, since their general sensibility is the same under normal conditions. The formal and verbal elements come from the intellectual constitution of the individual. ~~As~~ the result of a long process of development under practically the same physical and social conditions, certain forms of thought and modes of verbal expression have become so ingrained in the human mind as to be the stable contents of its experiences. It may be that these forms of thought and speech have been evolved by the human intellect to serve the needs of our organic life. But through long and effective use in our practical life, they have so moulded our intellectual life that we cannot now think or experience except through them. Take, for example, the word "book". Corresponding to the word or name, there is a concept or idea in our mind as to what it means. Both the concept and the name "book" have no doubt been formed by our intellect to bring order into and communicate certain experiences of what we call paper, printing, etc. But at the present state of our mental development we cannot have these experiences except in the form and under the name of "book". When we have these experiences we feel that we have really a book immediately given to us. For the primitive man, however, who knew nothing of reading and writing, there might be the same experiences, but no "book". Thus the book is an object for us in so far as we construe certain sense-data as qualities of a substance occupying space and time, and bearing the name "book". Similar is the case with other objects of knowledge like chairs, tables, etc. In every case the object is what it is because certain sense-data come to us clothed with the formal and verbal elements which enter into the present level of human knowledge.

We are not aware of any constructive activity of the mind when we know an object, because it has become instinctive with us, just as we are not conscious of doing what has long become habitual for us. And as an instinctive activity of the mind, it forms a part of our mental constitution and its ways and forms are necessary and universal for all minds like our own. So the instinctive reaction of the mind to sense-data creates a necessity for the forms of its reaction. Hence the objects constructed by the human intellect become necessary for all individuals who have the same intellect. This view of the object seems to be endorsed by A. A. Bowman¹ when he observes: "But as the psycho-physical organism adjusts and readjusts itself to its environment until the point of relative stabilization is reached, there finally emerge certain stereotyped products, among them those well-defined presentational contents which are the familiar objects of our day-to-day-experience".

One thing, however, must here be made plain. When we say that we perceive the same object, say water, we do not mean that it is absolutely the same for all of us. The object is relatively or practically the same, because it serves the same practical purposes for us. We cannot logically prove that the water perceived by several men is absolutely the same, but we know that the practical effects produced by water are about the same for all normal persons. All men do not perceive all or even the same aspects of a thing. Yet the thing is judged to be the same because it has the same fundamental characters and practical effects for us. The universality and necessity of the objects of knowledge are more matters of our practical life than of anything else. The objects of knowledge are the stable constructions that we make of the real through certain instinctive modes of thought and speech, and they are the

¹ *Vide Studies in the Philosophy of Religion*, V. II, p. 231.

same for us in so far as they serve the same needs of our practical life. What the real is in itself and how it can be known are questions which we shall consider in the last chapter.

SENSE-DATA AND THE PERCEPTION OF OBJECTS

Perception is the most elementary and fundamental form of knowledge. To the ordinary mind, it is so simple and reliable that it presents no problem at all. We generally believe that what is given in perception must be true. Ordinarily, no man questions the truth of what he perceives by his senses. Even some logicians and philosophers uphold the common-sense view that perception is the ultimate ground of all knowledge and that there is no room for doubt or dispute in the matter of perception. Some Naiyāyikas tell us that all other forms of knowledge presuppose perception and must be based on it. So also, perception is the final test of all knowledge. We may question the truth of the knowledge derived from inference, testimony, etc., but the truth of perception is in a way beyond question. Knowledge derived from testimony and inference requires confirmation by perception, but the verifying perception is in need of no further confirmation. The Naiyāyikas, however, do not suggest that the truth of perception is self-evident and cannot be questioned. But some Western empiricists and modern realists go further than the Naiyāyikas and hold that 'whatever is known to us by perception is beyond the possibility of question'. W. T. Marvin, an American neo-realist, thinks that "Perception is the ultimate crucial test (of all knowledge), and, as such, it does not presuppose its own possibility. It simply is, and the man who questions it assumes it in order to do the questioning".¹ Similarly, Bertrand Russell tells us repeatedly that the truths of

¹ *The New Realism*, pp. 66-67.

perception are self-evident truths, for which we require no test at all.¹

But a close study of different perceptual situations would show that absolute reliance on the evidence of perception is more dogmatic than critical. It is true that there is a ~~case~~ case in which perception may be said to give ~~us~~ a true knowledge of reality, which is not and cannot be doubted. But what we generally mean by perception is the cognition of objects through the senses, i.e. sense-perception. And sense-perception, we find, is very often misleading. The sun as seen by the same person at different hours of the day wears different appearances, none of which can be said to be the real sun as averred by science. If several persons look at a book from different positions in the same room, no two of them will see exactly the same colour, shape and size of it. Of two lines of the same physical length, one would be seen as longer than the other, only if their ends are enclosed by arrows directed outwards and inwards respectively. To this we may add the illusory perceptions of snake in a rope, of silver in the mother-of-pearl and of ghosts in pillars and posts in a moonlit night. It would appear from all this that perception is not always true and that the evidence of perception may reasonably be doubted and validly contradicted. Hence in connection with perception arise such problems as: What is perception? How does it give us a cognition of objects? What is the reality of the objects of perception?

What is perception? This is the first question we have to answer. Different answers have been given to it from different standpoints. From the standpoint of psychology, perception has been defined as the cognition of external

¹ *The Problems of Philosophy*, ch. XI. *Our Knowledge of the External World*, p. 79

objects through the interpretation of one or more sensations. When I perceive a rose as red what happens is that the sensation of red colour produced by the stimulation of my visual sense is understood by me as the quality of a thing called rose. Similarly, when a boy perceives a fruit placed on the palm of his hand as an orange ~~he~~ takes his visual and tactual sensations as signifying the colour and touch qualities of an object named orange. If we analyse the mental processes involved in the perception of the rose we shall find that there is first the discrimination of the given sensation of red colour from other kinds of sensations like sound and touch or other variations of the same kind, like yellow and white. Secondly, it involves the act of assimilating the given sensation with like sensations, i.e. recognising it as similar to the red colour of other roses. Thirdly, the given colour sensation revives in my mind other touch and smell sensations with which it was connected or associated in my past experience, although I may not be explicitly aware of the process of reproduction. Then, we find that the whole group of given and revived sensations is referred to a particular point of space occupied by the object of perception which is *believed* to be really existing in the outside world and to possess the qualities of red colour, soft touch and sweet smell. What is true of the perception of the red rose is true of the perception of any other object of the external world. It is to be observed here that from the psychological standpoint we do not raise any question as to the truth or validity of perception. The object of perception may not really exist or it may exist in a way different from that in which it is perceived by us. Still, if we believe that it exists just as it is perceived, our cognition of the object is as good a perception as any other. Of course, in psychology we do not ignore the distinction between true and erroneous perception or

illusion. But for psychology both are perceptions, since both are due to sense-stimulation and interpretation of given sensations, although in the latter case the object which we believe to be real is not real.

From the logical standpoint perception has been defined in different ways, all of which, however, agree on one point, namely that perception must be a *true* cognition of some real object. The Buddhists define perception as the unerring cognition of some given *sensum* without any modification of it by subjective ideas (*kalpanā*) or the concepts of name, class, quality, action and relation. To perceive a sound is just to sense it as a particular bit of existence (*svalakṣaṇa*), but not to determine it in any way as the sound of a bell and as related to the class of sounds, or even to name it as sound. The Buddhists admit only such indeterminate cognition of simple particulars as valid perception. The determinate perception of such objects as trees, jars, etc. is either excluded from the category of perception or branded as invalid and erroneous perception. These and other complex objects of the world are not actually given sensations, but are mental constructions in which some given sense-data are combined with certain ideas and concepts which have no counterparts in the objects themselves. But what is thus constructed by the mind cannot be said to exist in the outer world and what does not exist cannot be sensed or perceived. It follows that perception is the cognition of an immediately given datum and is completely free from all subjective or conceptual determinations.

It is to be observed here that the definition of perception as the pure cognition of a sense-datum suffers from one serious defect. It reduces perception to mere sensation. But there is a fundamental distinction between the two. The sensation of colour or sound is the bare experience of

a sense-datum. But the perception of a tree or of a bell is not the awareness of a sense-datum but that of a concrete physical object. It cannot be said that what is perceived is the colour just seen or the sound just heard, while the tree or the bell is only inferred from the sensation of colour or sound. We are not aware of any mental process of inference separating the sensation of colour or sound from the perception of the tree or the bell. The perceptions arise along with the sensations. To see the colour of a tree is to perceive the tree at the same time. Hence to say that the one is perceived and the other is only inferred or imagined is to evade the real problem of perception. What we ought to do is not to reduce perception to sensation, but to explain how along with the sensation we have the perception of an object. We *perceive* a bell just when we *hear* its sound. This is the real fact we have got to explain. To say that the sound is perceived and the bell is only inferred is not to explain the actual facts of experience.

Another logical definition of perception is that it is a definite and true cognition of some object, produced by its contact with some sense. The cognition of the table before me is a perception in so far as it is due to the contact of my eyes with the table, and I have no doubt that the object is a table. The cognition of a distant figure as either a man or a post is a doubtful and indefinite cognition and, therefore, not a perception. In perception there is no element of doubt or indefiniteness affecting our cognition of the object. Every definite perception, however, is not a case of true perception. The perception of a snake in a piece of rope is definite but false, and so it is not a valid perception. From the standpoint of psychology illusion and hallucination may be treated as perception inasmuch as they are definite cognitions which are due to the contact of sense with some object or place. But in logic they are

not recognised as perceptions because they are eventually found to be false. Psychology considers all perceptions, no matter whether they are true or false, while logic is concerned only with true perception.

The definition of perception as the true cognition of an object which is brought about by the stimulation of our sense organs, is generally accepted by us. It is also accepted by many systems of philosophy, Indian and Western. But some philosophers like the modern Naiyāyikas and the Vedāntins reject it on the ground that sense-stimulation is not a universal and essential condition of perception. There may be perception without sense-object contact. God, we are told, perceives all things, but has no senses. When one perceives a snake in a rope, there is really no snake to come in contact with one's eyes. Of course, the perception in question is false. But the man who has it feels, even when he is corrected, that he did *perceive* something which he should not have so perceived. Mental states like the feelings of pleasure and pain are perceived by us without the help of any sense organ. Even in an ordinary true perception, like that of an orange from a distance, it cannot be said that there is a contact of its *perceived* touch and taste qualities with our sense organs. It appears, therefore, that sense-stimulation is an accidental and not an essential character of perception. What is really common to, and distinctive of, all perceptions is the *immediacy* of the knowledge given by them. We are said to perceive an object, if and when we know it directly, i.e. without taking the help of previous experiences or any reasoning process. So some Indian logicians propose to define perception as direct or immediate cognition (*sākṣāt pratīti*), although they admit that perception is in many cases conditioned by sense-object contact. This seems to us to be a more logical definition

of perception. To define a thing is to state its essential character or specify its essential nature so as to distinguish it from all other different things. To state the conditions, out of which a thing arises, and the effect it produces, is not so much to define as to describe it. To say, therefore, that perception is a cognition produced by sense-object contact or sense-stimulation is not to define it properly. Further, sense-stimulation is, on the one hand, absent in some cognitions which are avowedly perceptions and, on the other hand, it conditions not only perception but also sense-feelings like pleasures and pains. But for this we do not bring these feelings under the class of perceptions. It may be said that although feeling is, in some cases, conditioned by sense-stimulation, yet as a mental state it has a different character from that of perception. If this be so, then we are to say that what distinguishes perception from feeling is not the fact of sense-stimulation, which is common to both, but its own intrinsic character. And this distinctive character of perception is that it is a direct or immediate apprehension of objects. This distinctive character should be taken as its defining character and perception should be defined in logic as the immediate apprehension or direct cognition of real objects. It is this character which distinguishes perception from conception, inference and other kinds of indirect or mediate knowledge.

That there may be immediate knowledge without any stimulation of sense is admitted by many leading philosophers of the West. Knowledge by *acquaintance*, Russell tells us, is a direct knowledge of things without the intermediary of any process of inference. Of such acquaintance, he mentions as instances, our awareness of sense-data in sensation, of mental contents in introspection, of the past in memory and our knowledge of universals like whiteness, brotherhood, etc. Of these different cases,

acquaintance by memory and acquaintance with universals are undoubtedly immediate cognitions of certain things of which we have no sensations. Similarly, A. C. Ewing says, "Direct cognition would be quite possible without direct perception." But the definition of perception is generally given in Western philosophy in terms of sensation or sense-stimulation. Some modern thinkers of the West, however, have begun to realise the inaccuracy of this definition and propose to define perception as immediate cognition. Hobhouse, for instance, thinks that the common and essential character of simple ideas of sensation and reflection lies, not in their dependence on any sense organ or its stimulation, but in their immediate presence to consciousness. Hence while admitting that apprehension in the sense of perception is conditioned by sense-stimulation, he defines it as knowledge of what is immediately present to consciousness.¹ The late Professor Creighton also subscribes to the same view when he takes a percept as the result of the mind's 'direct mode of apprehending real things' and admits the possibility of a perception of the particular states of consciousness in one's mind in the same way in which we may perceive a physical object present to sense.²

Now we pass on to the second problem of perception, namely, how does perception give us a knowledge of objects in the way it seems to do and should do, according to our definition of it? We have defined perception as a direct cognition of objects. And it will be generally admitted that perceptual consciousness is not due to any process of inference or reasoning going on in our mind at the time or just before we have it. At least we cannot detect any such process when we examine any clear case.

¹ Cf. L. T. Hobhouse, *The Theory of Knowledge*, Pt. I, ch. I.

² Cf. *An Introductory Logic*, pp. 54-55.

of perception. If I look out of the window of my room, I see a tree directly, and not by means of any process of inference or reasoning. There is neither any necessity nor any time for me to think and reason before the perception of the tree arises in my mind. I have also no doubt in my mind that there is really a tree which I ~~now~~ perceive with my eyes. But what is it that my eyes actually ~~give~~ me? It is only a patch of green. The sense of sight cannot directly apprehend anything about the touch, taste and other qualities of the tree. Nor can it see directly the colour of the other parts of the tree, lying besides or behind that where the patch of green is, so long as I do not change my position. But what I *perceive* is not merely a patch of green, but a big object including many parts and having other qualities than colour. In a similar way it can be shown that in the perception of objects like chairs and tables, the senses give us certain colours, sounds, tastes, smells and touch qualities. That which is directly sensed by a sense organ is now called a *sensum* or *sense-datum*. Now the question is this: How can there be a perception of objects or things in the sense of a direct cognition of them, when all that one can directly get is one or more sense-data like colour or touch? An object or thing is certainly not a colour or touch, nor a collection of colours, touches, tastes, etc., but an entity or substance which has these as its qualities.

Some empiricists who are also associationists think that perception consists in recalling or remembering past sense-data when one is present to our consciousness. When I see the colour of a tree (i.e. get a colour-sensum), I recall all the other sense-data with which it was associated in my past experience of trees. That is, the present sensation of colour revives in my mind the colour and touch sensations of its other parts in the form of images. The

perception of the tree is just this present colour-sensation together with the images of other sensations which were usually connected with it in the past.

The associationist account of perception is plainly false, and that for at least two reasons. When we perceive a tree from a distance we do not recall and have images of its other qualities and parts on seeing the colour of one part. We perceive the tree just when we see a certain colour. To see the colour is just to perceive the tree, so much so that we cannot see the colour and yet not perceive a tree at the same time. Secondly, even if it be true that in perceiving a thing we have images of past sense-data along with a present one, we do not understand how this can explain our cognition of the thing. The thing is not merely an aggregate of sense-data or sense-qualities, but an entity or being which *has* or is somehow *related* to those data or qualities. Of this entity or being we neither have nor can have any sensation or image.

Many rationalistic thinkers, including both Idealists and Realists, say that the existence of the objects of perception is *inferred* from present sensations or sense-data. Thus some realists like the Sautrāntika Buddhist would say that the existence of external objects cannot be perceived by us, because what our mind directly knows is its own states. But from such mental states as are copies of objects we can infer the existence of the latter as causes of the former. So also, Russell seems to think that the existence of physical objects is not directly known to us, but inferred from the existence of sense-data with which we are acquainted, i.e. of which we are directly aware. The idealists generally hold that objects have no existence apart from our experience of them. When we perceive an object what happens is that from one experience we pass in thought to

other possible experiences. We perceive a tree when with the experience of its front part we *think* of its other parts and take all the parts as forming a system of experiences. This then seems to mean that perception is the process in which from one experience we infer others and put them all into one whole.

The above account of perceptual consciousness is nearly as bad as that of the associationists. If in perception we are not directly aware of objects, no inference from sense-data can lead to any indirect knowledge about them. If nowhere in our experience we have a direct cognition of objects, how could we possibly know that there was any object at all to be inferred? Hence, in the absence of some direct knowledge of the object we cannot infer it. Further, when we perceive anything we do not *infer* and are not aware of any process of arriving at conclusions from premises. The perceptual cognition of a tree before my eyes is not what I arrive at from something called sense-datum, but what I simply *have* along with the sense-datum.

Bertrand Russell in his *The Problems of Philosophy* tells us that while we are acquainted with sense-data, we know physical objects by description. Let us try to understand his position. According to him, there are two kinds of knowledge of things, namely, knowledge by *acquaintance* and knowledge by *description*. 'We have acquaintance with anything of which we are directly aware, without the intermediary of any process of inference or any knowledge of truths. Thus in the presence of my table I am acquainted with such sense-data as its colour, shape, hardness, smoothness, etc.' He gives 'the name of "sense-data" to the things that are immediately known in sensation; such things as colours, sounds, smells, hardnesses, roughnesses, tastes, etc.' By "sensation" he means 'the experience of being immediately aware of these things.

Whenever we see a colour, we have a sensation of the colour, but the colour itself is a sense-datum, not a sensation. The colour is that *of* which we are immediately aware, and the awareness itself is the sensation.' Now it is plain that if we are to know anything about the table, it must be by means of such sense-data as brown colour, oblong shape, smoothness, etc. which we associate with the table. But these sense-data are the appearances of the table and not the table itself ; nor are they directly even properties of the table. The same table seems to have different colours, shapes and touch qualities for different persons and for the same person under different circumstances. Different people looking at a table at the same time and consequently from different positions will see different colours. None of these can be taken as the real colour of the table, for one has as good a claim to be regarded as *the* colour of the table as any other, and we cannot consistently maintain that the same thing is differently coloured at the same time. Similar is the case with the shape and touch of the table. These too are different for different people or for the same person under different circumstances. The sense-data, depending as they do, on the relation of the observer to some object, give us merely the appearances of the object. They cannot tell us anything about the reality of the object, or the object as it really is apart from us. Hence it follows that we can have no acquaintance with or direct knowledge of objects like tables and trees. Our knowledge of the table as a physical object is obtained through acquaintance with sense-data that make up the appearance of the table. It is of the kind which is called "knowledge by description." We know the table by some such description as 'the table is the physical object which causes such-and-such sense-data.' In order to know the table we must know truths connecting

it with things with which we have acquaintance. We must know that 'such-and-such sense-data are caused by a physical object.' Our knowledge of the table is not and cannot be direct knowledge, the sort of knowledge we have of sense-data. 'All our knowledge of the table is really knowledge of *truths*, and the actual thing ~~which~~ is the table is not, strictly speaking, known to us at all. We know ~~a~~ description, and we know that there is just one object to which this description applies, though the object itself is not directly known to us. In such a case, we say that our knowledge of the object is knowledge by description.'

Russell's position with regard to the knowledge of objects through the senses—a position which is abandoned in his later works—seems to be both critical and paradoxical. Taking any common object of the sort that is supposed to be known by the senses, he shows how what the senses *immediately* tells us is not the truth about the object, but only the truth about certain sense-data. Thus when in the presence of a table we say 'we perceive a table', the truth of the matter is that our senses acquaint us with such sense-data as a brown colour, oblong shape, etc. These are the things of which we are immediately aware and their existence cannot be doubted by us. But when from these we pass on to the judgment that 'there is a real table with brown colour and oblong shape', we are involved in difficulties. The table as a physical object is not given to any of our senses ; it is not immediately known to us at all. We cannot even say that the table has really a brown colour and oblong shape, and is hard and smooth. For all we know, these are merely appearances which may be and actually are replaced by other different colours, shapes, etc., when the table is observed by others or observed from a different point of view. Hence we should say that no colour, shape or size, belongs to the real table. As Russell himself says,

"Thus colour is not something inherent in the table, but something depending upon the table and the spectator and the way light falls on the table". If this is so, how do we know that there is a real table at all? According to Russell, we know it by a description like this: 'the table is the physical object which causes such-and-such sense-

But, then, how could we be sure that there is anything to which this description applies? It is the causal principle, so thinks Russell, which gives us this assurance. This means that the existence of the real table is *inferred* by us from the existence of the sense-data with which we are acquainted and of which the table is the cause. But if it be true that the real table has no colour, shape or touch quality inherent in it, we do not understand how it can be described as a table at all. Neither in ordinary life nor in philosophy should we speak of a colourless and shapeless something as a table. So it may be that there is no real table but the one which we perceive and which has in fact a certain colour, shape, etc. That our sense-data such as colour, shape, smoothness, etc., are caused by *something* existing independently of us may be true. But if this something differs, as Russell thinks it does differ, completely from our sense-data, we find no sense in which it can at all be described as a table. Supposing that something like it is the real table, we may ask: Have we any means of knowing it? Russell says that it can be described by means of certain sense-data and inferred as the cause of those sense-data. But how can that which is neither sense-data nor qualified by them, be described in terms of any sense-datum? How, again, in the absence of some direct experience of it, can we form the idea of a real table as the cause of such-and-such sense-data? Even if we take all this for granted and say with Russell that our knowledge of the table or of any physical object is "knowledge by

description'', we cannot but feel that this fails to explain the perceptual consciousness that we undoubtedly have of the table or any other physical object before us. The table at which I am now sitting is perceived by me as something which is present to my consciousness and is directly known by me, and not as something which is described and inferred by me. When I perceive the table I simply do *not* describe and infer it.

G. E. Moore holds a view with regard to the perception of objects which is very similar to that of Russell as explained above. According to him, the physical object lies beyond or behind the sense-data from which we know it. The visual sense-data or, as he calls them, sensibles that I may get when I look at two coins situated obliquely to my line of sight and at different distances from me, do not correspond with their real shape and size. The visual sensibles are elliptical, whereas the coins are circular. The coin farther away from me may be larger than the one nearer my sight. But its visual sensible is visibly smaller than that of the latter. So it cannot be said that the sensibles are identical with the objects or any part of them. Still, I know the physical object *by description* as 'the thing which has some particular kind of causal relation to my experience of the sensibles', the relation being expressed by saying that it is their "source". This source, however, is not itself a sensible nor does it consist simply of sensibles. It exists as a physical reality in the natural sense and has really a natural shape and size of its own. Although the sensibles are not identical with, and do not occupy the same place as, the physical object, yet those of them which relate to the object's primary qualities, and those only, *resemble* the physical object which is their source in respect of its shape. If it be asked: How can I ever come to know that these sensibles have a "source" at all, and that the

"source" has this or that shape? Moore would say in reply, "It would seem that, if I do know these things at all, I must know *immediately*, in the case of *some* sensibles, both that they have a source and what the shape of this source is".¹

Moore's position, if we have stated it correctly, seems to be rather ambiguous. He undertakes a critical analysis of perception obviously because both common sense and naive realism fail to solve the problems which naturally arise out of the distinction between sense-data and physical reality or object. We know the physical object through some sense-data. But while sense-data are immediately known in sensation, the physical object is not and cannot be so known. Moore seems to recognise this truth throughout his long-drawn logical analysis of perception. But in the face of the perplexing difficulties that are bound to arise here, he finds it expedient to revert to common sense and say that in the case of *some* sensibles at least we know *immediately* both the physical object and its primary qualities. But if this be true, we should go further with the man of common sense and give up the distinction between sensibles and object, and say that what we sense is the object and its real qualities, be they primary or secondary. Further, if an immediate knowledge of the physical object is possible in some cases, we do not see any reason why it should not be so in other cases as well. And if that be possible and actual in all cases, there would be no necessity for us to know the object by description or by inference as the source or cause of the sensibles. And with this, there would be no occasion for errors in perception like illusion and hallucination. At least, Moore should have explained the conditions under which we know immediately the existence of both the physical object and its

¹ Cf. G. E. Moore, *Philosophical Studies*, ch. V, esp. pp. 185-196.

qualities. If these could be stated, we would arrive at a satisfactory solution of the problem of perception. So long as this cannot be done, the problem of perception would remain a problem for us.

The second problem of perception may be restated thus: When we sense some sense-data, how is it that we perceive an object or thing which is not merely the sense-data? The different ways of solving the problem we have considered so far, are found to be unsatisfactory. To solve the problem, or at least to tackle it with any hope of success, we should consider *the nature and status of sense-data*, their relation to one another and their relation to the object perceived through them. This will enable us to understand also the nature and reality of objects of perception.

✓ A sense-datum is, as the etymology of the word would suggest, what is just given to some sense organ in the sense of being directly apprehended by it. Thus a colour just seen by the eye or a sound just heard by the auditory sense may be said to be an instance of what we call a sense-datum. But to define a sense-datum by reference to a sense organ is perhaps to get involved in a vicious circle. A sense organ is not itself sensed, but inferred from the occurrence of sense-data or sensations. We are, therefore, to understand a sense organ with the help of sense-data, and not the other way. If we say that a sense-datum is simply what is given, i.e. is directly present to consciousness, we will have to regard the data of memory and introspection also as sense-data, for these also are directly present to our consciousness. Thus in memory we are directly aware of past events and in introspection of our own feelings, thoughts and mental acts. What then is the distinction between sense-data and memory or introspective data? We may say that a sense-datum is a simple sensuous existent. H. H. Price calls it a *particular existent* which

is not a phase of anything else and yet is not a substance. But it seems better to say that it is a particular sensuous existent, so that there may be no confusion between sense-data and the other kinds of data which also are particular existents.

Taking 'sense-data' to mean such simple or particular sensuous existents which are directly present to our consciousness, we propose to include among them the data of all sensory experiences. There are different classes of sensory experiences. As G. E. Moore points out, these are (1) the sensory experiences which are called *sensations proper*, (2) the experiences of having "after-sensations" or "after-images", (3) hallucinations and sensory illusions, (4) the sensory experiences we have in dreams, and (5) the experience of what are called "images" in the strict sense. That what is given in sensations proper is a sense-datum is admitted by all. Bertrand Russell in his earlier books gives the name of "sense-data" to the things that are immediately known in sensation: such things as colours, sounds, smells, hardnesses, roughnesses and so on.' Similarly, that which we directly get in after-sensations, hallucinations and illusions is also generally called a sense-datum. But all people may not agree that in dreams or in the contemplation of mental images also we have sense-data. These may be said to refer directly to images of sense-data and not sense-data themselves. But the facts that "images" are as much "particular existents" as any other accredited sense-datum and possess a sensuous character like it and are also directly present to our consciousness would justify us in regarding them as sense-data. As Moore rightly points out, images intrinsically resemble the entities which are experienced in sensations proper in some very important respect.

Now all sense-data are entities which are immediately known by us. This immediate knowledge of sense-data is

variously called "direct apprehension", "intuitive apprehension", and "acquaintance". Those, however, who would take sense-data to mean only the entities given in *sensation* would call it *sensing*. But whatever the name we give to it, it is generally agreed that the direct knowledge we have of sense-data admits of no degrees of development and has no room for doubt or error in it. To take an example from Price,¹ when I see a tomato I can doubt whether there is really any such thing as tomato or whether there is any material thing at all. 'One thing, however, I cannot doubt: that there exists a red patch of a round and somewhat bulgy shape standing in certain spatial relations to other colour-patches seen by me at the same time, and that the whole field of colour is directly present to my consciousness'. I can doubt many other things about the red patch. 'But that it now *exists*, and that *I* am conscious of it,—this cannot possibly be doubted by me who am conscious of it.' So far as my knowledge of the red patch is concerned, I know it perfectly and completely just when I see it. There is in it no development from an indefinite to a definite state of consciousness. It exists in full perfection or not at all. It admits of no degrees of definiteness because it is, so thinks Price, a form of consciousness in which the mind does not attribute any characteristic to something but is simply confronted with something. Where a certain characteristic is attributed to something, e.g. when we say, 'the table over there is rectangular', our knowledge may be more or less definite, according as the characteristic attributed is more or less definitely known. But when the brown colour of the table is directly presented to me, my knowledge of the colour is full and complete just at the start, and my subsequent knowledge *about* it will not increase my knowledge of the colour itself. Thus

¹ Vide H. H. Price, *Perception*, pp. 3 ff.

'acquaintance with sense-data is complete in any one moment' and there is in it no passage from less to more knowledge.

Just as acquaintance with sense-data has no degrees of definiteness, so the sense-data themselves admit of no degrees of completeness or definiteness. The red patch seen me is known altogether and in its entirety. As Price says, 'the notions of definite and indefinite do not apply to it at all. It is a particular existent having a perfectly specific nature. It is of just exactly this shade of colour and has just this shape and no other.'

When we have acquaintance with a sense-datum, we can doubt neither our acquaintance nor the existence of the sense-datum. But the examples of sense-data that are usually given by us are perhaps not really such. Russell cites colours, sounds, smells, etc. as instances of sense-data. Price goes further and takes a red patch with the spatial characteristics of round shape, etc. as an example. But it is doubtful whether any of these can be called a sense-datum proper and whether we have acquaintance with them in the strict sense of the term. If there were real acquaintance, there would be no room for doubt in our apprehension of them. But although we do not ordinarily doubt the existence of the colours and sounds we see and hear, it is too much to say that these cannot possibly be doubted. When a man says, 'I cannot believe my eyes and ears', he does doubt the existence of the colour or shape seen, and the sounds heard by him. Even if this statement be not taken as literally true, for which we find no reason, we are to point out that acquaintance by its very nature is such that there cannot be any acquaintance with colour and sound, far less with red colour and loud sound. If we are acquainted with what is simply *given* or directly presented to consciousness we have acquaintance with neither colour nor red colour.

To apprehend colour *as* colour or *as* red colour is to determine *the given* or the datum by the name 'colour' in the one case, and further specify it *as* red in the other. Russell admits this when he points out that to say that a colour seen by us is brown is to say something *about* or know a truth *about* the colour. Price also admits that if a datum is reflected upon and described, it is no longer ~~merely~~ a datum. He goes further and allows, if for the sake of argument only, "that everything which can be said to be given to a mind is also 'judged about' by that mind, i.e. recognized to have certain qualities and relations, at any rate certain very general ones." But he practically admits the truth of our contention when he says that 'from the fact that we recognize (and describe) something as red and round, we can conclude that we are not *merely* acquainted with it, but not that we are *not* acquainted with it'. It follows from this that 'a red and round patch of colour 'is not what we are merely acquainted with or, better, really acquainted with. It is rather what we judge ~~something~~, we are acquainted with, to be, or how we recognise and describe *something*, we are acquainted with. May it not, then, be that what we are acquainted with or what is really given is a mere something, or mere existence only? To say simply that it is 'colour' is somehow to judge about and describe the given something by a very general quality or at least by a name. Of course, when we see a colour, we need not call it a colour or name it as colour. But the verbal image of colour must be there if it is to be known or apprehended as a colour. Short of this, we cannot have any cognition of colour, but only of a mere something. Hence we are to say that a pure sense-datum with which we are only acquainted is a particular existent or a mere something or being *as such*. What is thus true of colour as a supposed sense-datum is no less true of other so-called sense-data like sounds, smells,

etc. In the case of each of these also, what we are just acquainted with but do not describe in any way, is a particular existent or being. This being is judged about and described by us as a sound, a smell, and so on, either just when we are acquainted with it or immediately after. We can form some idea of what it is like before its being recognised as a sound or smell or colour, if we consider how we feel the presence of something to which we are not particularly attending but which lies on the border lines of our field of attention. When reading a book placed in the direct line of my vision, I may also see the walls of the room situated obliquely to my line of sight. But what I then see are not walls but a mere something, some presence or being *as such*. It seems, therefore, that a pure sense-datum is more like "this something" than any of the colours, sounds or smells that we may or usually do take it for.

Although colours, sounds, smells, etc., are not *merely* data, yet they are data in a sense. To any one of us who is endowed with the sense organs, with which we are endowed, they seem to be as much given as the mere existence of a thing. When we are conscious of them we are not *conscious* of any intellectual process concerned in judging about them. Any such process is not detected by the mind at the time we apprehend them, although it may be discovered by subsequent logical analysis. It is as if the act of judging has become an organic process, so much so that the recognition of something as coloured red, sounding loud and so forth amounts to a simple cognition of it. The perception of physical objects or things is a direct cognition of them in this sense. So when we speak of sense-data we usually mean such things as colours, sounds, etc., which are practically given to our senses in this way.

Let us next try to understand the status of sense-data. Are sense-data physical or mental? Or, are they neither

physical nor mental? Or, in the last alternative, are they both physical and mental, i.e. psycho-physical in some sense?

Realism, both old and new, holds that all sense-data are parts of the physical object and so are themselves physical. The old school of realism is known as common-sense or naive realism, and one of the modern schools is called neo-realism or new realism. The old school has its formulators and advocates in all parts of the world; the neo-realist school is largely American in origin, although it has its followers in other countries also. For common-sense realism there is in perception a direct contact of the mind with the object known. Things are directly presented to our consciousness. All the qualities and relations which we perceive are in the things themselves and we perceive them just as they are. Hence what we get in perception are the actual parts or elements of things themselves. The neo-realists also hold that knowledge is a direct relation between a mind and some object. Hence their view is sometimes called "direct realism". In their zeal for the directness of knowledge some neo-realists deny the reality of mind or consciousness and reduce it to a special grouping of objects to which the nervous system responds in a specific way. This means that when our nervous system responds specifically to certain objects, and makes a separate collection of them from other objects we have a mind knowing or being conscious of those objects. Other neo-realists do not go so far, but admit that mind or consciousness has a distinct reality and character of its own. But they admit also that when an object is known, it somehow gets within our consciousness, so that the contents of knowledge are the contents or parts of the object itself. Hence the data that we get in perception are actual portions or real qualities of physical objects.

This view of sense-data as parts or qualities of physical objects and, therefore, as merely physical is not acceptable. It cannot explain, as it should, how different and even contradictory qualities can belong to the same physical object. In the presence of the same object one man may perceive green, another red, and a third grey. But we cannot say that the same object is wholly green, red and grey at the same time. In the case of illusion we find certain data of sense which are not only inadequate aspects of physical things, but are very different from any of their real aspects. Sometimes we see silver in some shiny thing, but are disappointed when we pick it up. To a diseased eye all things look yellow, but we know that they are not really so. Some people see two moons or two candles where there is really but one. In the case of complete hallucination we have what C. D. Broad has called 'wild' sense-data which belong in no way to any physical object at all. Lunatics and delirious patients speak of things and events which have no place anywhere in the physical world. All this goes to show that sense-data are not parts of physical objects and themselves merely physical.

Some neo-realists like E. B. Holt try to explain the above difficulties by saying that different, contrary and even contradictory sense-data may belong to the same thing. Just as in any mirrored space we see how sundry mirrored objects occupy the same space as is occupied by real objects situated behind the mirror, so different and sometimes opposite characters may belong to the same thing. But all the characters of the thing have not the same sort of being. While the real characters of the thing *exist* in physical space, its unreal or illusory characters only *subsist* in the world of being. This means that unreal and illusory sense-data somehow *are*, but do not exist in the physical things to which they are referred. But if there are some

sense-data which do not physically exist, we do not see how they can be said to be parts of physical things or to characterise them in any way. If, on the other hand, they somehow *are* and are characters of physical objects, there would be no error or illusion in the world. For even the illusory data have being and subsist, ~~if~~ not exist, in things. Any way, the view that all sense-data are physical entities is abandoned.

The second view with regard to the status of sense-data is that they are mental. This view is generally held by idealists and also by some realists who are representationists. Both naïve and new realism uphold the doctrine of presentationism, namely that in knowledge objects are directly presented to the mind. But some dualistic realists like Locke and the Sautrāntika Buddhist hold that the mind can be directly conscious only of its own states or ideas. These ideas, however, somehow represent external objects which cannot be directly known by the mind. If we are to know the existence of external objects it ~~must~~ be through ideas which are representations of objects in our mind. Now if by sense-data we mean entities of which we are immediately aware, these must be ideas or mental contents. Some idealists like Berkeley and the Yogācāra Buddhist deny the existence of material objects and identify them with ideas existing either in the mind of God (Berkeley), or in our mind which somehow objectifies them (Yogācāra). Thus sense-data come to be regarded as mental.

Now we are to observe that there would be no sense-data if there were no minds to come into relation to something other than mind. It is also true that sense-data would not be, unless they were experienced by the mind. This shows that they are dependent on the mind to some extent. But to be somehow dependent on the mind is not to be mental, i.e. an idea or state of the mind. An idea is what is

in the mind, but a sense-datum is what is *before* the mind or is presented *to* it. If sense-data were purely mental contents we could carry them within us like our thoughts and feelings, and control and even create them at will. That we cannot do all this is evidence that they are not merely ideas of the mind. Further, if sense-data are contained within the mind, then we are to say that when the mind cognises blue or red, it becomes itself blue or red, and gets expanded when the sense-datum is expanded. Further, if, as some idealists would say, there were no objects and everything were an idea, we do not know how the mind can possibly *objectify* any idea or how it can form the idea of objectivity at all.

Let us now turn to the view that sense-data are neither physical nor mental. This view we find accepted by some neo-realists and all critical realists. Russell in his *The Analysis of Mind* gives up the distinction between sensations and sense-data, which we find in his earlier books.¹ Here he agrees with the American neo-realists like Professor R. B. Perry and E. B. Holt and holds that both mind and matter are composed of certain neutral particulars which in themselves are neither mental nor material, with one reservation, namely that images are purely mental and belong only to the mental world. 'As regards sensations, i.e. what is heard or seen' (or what he once used to call sense-data) he expressly states that these are composed of neutral particulars and 'belong equally to psychology which deals with mind and to physics which deals with matter'.² This means that sensations and sense-data are really the same neutral entities or particulars which taken in one context or system form the subject-matter of psychology, and taken

¹ Cf. Bertrand Russell, *The Problems of Philosophy, Our Knowledge of the External World*.

² Cf. *The Analysis of Mind*, p. 25.

in another context or system form the subject-matter of physics.

Critical realism is another form of modern realism, which has been propounded by some American philosophers. All of them agree in holding that the data we directly get in perception cannot be physical existents, for that will lead us to posit the existence of contrary and contradictory characters in the same thing at the same time. They agree further that the data of perception cannot be mental existents, states or ideas of the mind. For, the sense-datum that we get in the perception of a round table is "a round-table-about-three-feet-high", but the corresponding mental state can be neither round nor about three feet in height. Hence they conclude that the data of perception are essences or character-complexes of physical objects and not the physical objects themselves nor any of our mental states. Beyond this point the critical realists differ from one another. Some of them like Professor Drake hold that sense-data "are non-physical experienced particulars" which are brought into being by the interaction between a physical object and our organism and are projected or imagined by us to be out there in space and irresistibly taken to be the characters of the physical object. On the other hand, Professor Santayana and with him Professor Pratt also seem to think that the essences or data are logical entities or Platonic ideas which subsist eternally in the Universe and are only to be discovered by our mind and, in true perception, are the characters of the physical object.

Apart from the other difficulties in which the view of sense-data as "neutral entities", or "non-physical and non-mental particulars" is involved, we are to point out that it ignores the distinctive character of a sense-datum. All sense-data have the character of physicality or sensuousness about them, and this cannot be explained by any

manipulation of neutral particulars. To say, as some neo-realists have said, that the neutral entities taken in one context and arranged in one system form matter, is perhaps not to explain but pre-suppose the very thing to be explained. How can we sensibly speak of a context or system with ~~reference~~ to entities which have no physical or ~~mental~~ character? Short of some determinate physical character we cannot speak of 'entities' in the plural, because what is non-physical cannot be numbered as one or many. And if there is but one neutral-stuff, there cannot be any context or system in it, nor can any arise out of it. The critical realists are all agreed that sense-data are non-physical, although they differ on other points. But if it be really so, we do not understand how any sense-datum can be, or can be identical with, the character of the physical object even in true perception. To say that a sense-datum is, or is identical with, the physical character of the object is to say that the non-physical *is* physical, or, at least, is ~~identical~~ with the physical. But how this can be so is beyond one's comprehension.

What then is the status of sense-data if they are neither physical nor mental nor neutral even? The view we propose to take here is that they are psycho-physiological. This means that sense-data appear and are experienced because our mind-body reacts in certain specific ways to the influences of a reality outside and manifests it as having certain sensible qualities like colours, sounds, smells, tastes and touches. They depend on our organism but are not within the organism or the mind-body. The colour seen by me depends on my body in the sense that it is the visual organ that manifests light rays as coloured, and it depends on my mind in so far as it is given through a sensation and experienced as a sensible quality of something. The auditory sense manifests ether waves as sound which is

apprehended through the sensation of sound and experienced as a sensible quality of something. Similarly, the tactual sense manifests certain contacts as hard or soft, hot or cold and these are experienced in the corresponding sensations as sensible qualities of things. It would thus seem that sense-data like colour, sound, etc. belong at once to the senses which manifest them and the things which are manifested by them. But one peculiarity which we should note here is that some sense-data like touch and colour seem to be more intimately related to things than to the senses, while others like sound, taste and smell seem to be more closely related to the sense organs than to things. Thus colours, hardness and softness appear to be *out* there in a cloud, a stone or the luxuriant grass, while tastes, smells and sounds seem to be *in* our tongues, noses and ears respectively. This is perhaps the reason why the spatial characters of things, revealed by sight and touch, are taken as their primary qualities, while those given by the other sense organs are labelled as merely secondary qualities. But the truth of the matter is that both sets of qualities are equally primary or equally secondary, in whatever sense we may use these words. If by being primary we mean being common to all percipients, then the one set is as much primary as the other, since despite all variations, which are common to both the sets, we speak as much of the normal or natural taste and smell of a thing as of its normal shape and size. But if to be secondary means to be revealed by, or to be dependent on, the senses, then all of them are equally secondary. Just as there would be no tastes and smells if there were no tongues and noses, so touches would not be, if the cutaneous sense were not. Or, speaking generally, we may say that there would be no sense-qualities or sense-data if there were no mind-body or organism to respond to the influences of the world out-

side. In fact, the distinction of primary and secondary has no significance so far as sense-data are concerned, since all of them equally depend on organic processes.

It follows from the above that there cannot be any sense-datum which is not actually sensed or experienced by us. Some realist philosophers like Moore and Russell think that sense-data exist even when they are not experienced. They call them "sensibilia" instead of 'sense-data' because the latter word may lead one to think that they are actually the data of some sense, i.e. experienced by us. Sensibles or sensibilia, on the other hand, are entities which may be experienced at times, but which continue to exist unaltered when not experienced. But this can be true if we admit that sense-data are physical entities in the realistic sense. We have seen that they cannot be said to be physical or parts of physical things. Since a sense-datum is what is manifested by the activity of the senses, we cannot sensibly speak of an unmanifested sense-datum. As such, sense-data should be regarded as sensuous particulars which exist when they are actually experienced, but are non-existent when not so experienced. A table has a brown colour when the rays of light falling on it affect our visual organ which reacts to them in certain specific ways. In a dark room we cannot see the colour of the table, not because it has a brown colour and this cannot be seen, but because there is no colour in the dark. So also with regard to other kinds of sense-data. All of them *are* as and when experienced, they are *not* when not so experienced.

Let us now consider the relation of sense-data to one another. There are, broadly speaking, five kinds of sense-data. These are called visual, tactual, auditory, gustatory and olfactory, after the corresponding external senses. On this view, kinaesthetic and other organic sensations are

either included within the actual or reduced to feelings produced by bodily movements. How that is done we need not discuss here.¹ All that we need say here is that the so-called kinaesthetic and organic sensations do not *acquaint* us with any sense-data like visual and tactual ones, and that they are not as distinct from the other ~~kinds~~ of sensations as these are from one another. The other kinds ~~sensations~~, viz. those of colour, touch, sound, taste and smell, are quite different and distinct from one another, so much so that we cannot reduce any of them to any other.

Just as the sensations given by the different senses are different and distinct from one another, so too are the corresponding sense-data. While different colours form a class by themselves, sounds form quite a different class, and so also the other kinds of sense-data. These form different and distinct classes and there seems to be no passage from the one to the other. This fact goes directly against "the class theory" of sense-data which holds 'that all the sense-data which belong to one thing have to each other the relation of *resemblance* and that the group which they form is just a class'. Far from this being true, what we actually find is that the colour, sound and smell which may belong to the same thing do not resemble but differ very much from one another. The fact that they all belong to the same thing does not make them similar in any way, but may make them mutually confamiliar sense-data. The colour of a thing may be usually associated with a certain sound and smell, and may also give us an idea of what these may be like, at the time when we are not actually sensing them. But none the less, they remain different from and dissimilar to one another.

While in respect of their nature sense-data do not

¹ For this the reader may be referred to the author's *The Nyāya Theory of Knowledge*, pp. 145-51.

resemble one another, in respect of their existence they are found to be associated, one with the others. But while in the case of ordinary objects or things, all of them are found to go together, in themselves some may *be* without the others, while some cannot *be* without being related to certain others. Thus smell as a sense-datum is naturally related to taste, colour, touch and sound as possible sense-data. This means that if an object has some smell, it must have some taste, colour, etc. Taste as a sense-datum is naturally connected with some colour, touch and sound, but not so connected with smell. So there may be taste without smell, but not without colour, touch and sound, as when we taste pure water. Colour is a sense-datum which is naturally related to touch and sound as possible data, but is not always related to taste and smell, as when we see a fire burning close-by. The sense-datum of touch is naturally related to sound as a possible datum, but not so related to colour, taste and smell. There may be touch without colour etc., as when we breathe pure air.

Another kind of relation which we find to subsist among sense-data is *factual* co-existence as distinguished from *natural* relation or association. Colour is not by its nature related to taste and smell, but may in fact co-exist with certain tastes and smells. Similarly, certain touch-qualities co-exist with certain visual data and certain tastes and smells, although a tactual datum need not be related to any colour, taste or smell. Sound generally co-exists with certain tactual and visual qualities, although it may be without them. Sense-data which are thus related in fact or by nature, in the sense explained here, are members of a system or group. All the members of the group are not and cannot be simultaneously experienced. But if when one is actually a datum, i.e. is experienced, the others are found to be possible data which may be actualised, we take all of them

as co-existent parts of the whole system or group. When, however, any sense-datum fails to lead on to the other members of the group, it is rejected as illusory. Sometimes an illusory sense-datum *seems* to exist as a member of the group. But when we follow it up we find that the other members of group do not co-exist with ~~it~~. The taste, smell, colour, sound and touch qualities of an orange ~~form~~ a system or group in this sense. On the other hand, the colour of a toy orange does not, although it may seem to, form a system or group, because the colour sensum does not, in fact, co-exist with the other kinds of data.

We have now to consider the question how sense-data are related to the objects of perception. By 'objects' we here mean such things as tables, chairs, trees, etc., which are generally included among the objects of perception. These are also called material things or material objects. Ordinarily, we also call them 'physical objects'. Some philosophers make a distinction between 'perceived object' or 'material object' on the one hand, ~~and~~ 'physical object' on the other. But from our point of view, a 'physical object' is indistinguishable from a perceived or material object. This will become clear in the course of the present discussion.

The doctrine of Phenomenalism reduces the object or material thing to a collection of sense-data only. It holds that an object like the table is just a group of sense-data, such as colour, shape, size, hardness, etc., only one of which may be actual but all obtainable at a time. Ordinarily we say that the colour 'belongs to' the table, or is 'of' the table. But what is really meant is that the colour is a member of the group of sense-data constituting the table. Among modern realists Russell subscribes to this view in his later works where he says that 'an object is the sum total of the appearances presented by it at all places

at a given moment', or 'that a thing is the whole class of its appearances'.

But a closer view of the matter shows that Phenomenalism is false. If an object be but the totality of all actual and possible sense-data, we cannot form an idea of any object until we have got all the possible sense-data in relation to it. Or, if some of the data can be taken as the object, there is no reason why any one of them cannot be so taken. In truth, however, an object like the table is neither a sense-datum nor a collection of sense-data. Further, a collection of sense-data cannot perform the functions assigned to it by the phenomenalist or those which are found in an object like the table. How can sense-data be causally efficient and present themselves to the percipient? How again can they support and resist other things in the way in which we find a table to do so? Hence we must admit that over and above mere sense-data there is something or some reality which has these causal functions and presents such-and-such data to the percipient mind.

Some realists think that the real object is neither the actual nor the possible sense-data, nor again the sum total of all actual and possible sense-data. It is the 'physical object' which occupies physical space and is the *source* of the sense-data. This is known as the Causal Theory. Russell in his earliest work seems to hold this view. He makes a distinction between the real table which is not immediately known to us at all, and the sense-data which we immediately know, but which are merely "appearances" of the table and not the table itself nor directly properties of the table. Moore holds substantially the same view with regard to the relation of sensibles to physical objects. According to him, physical objects like a half crown and a florin are not composed of sensibles either actual or possible,

although some sensibles *resemble* the physical objects which are their source, in respect of their primary qualities.

This view of the relation of sense-data to the object is also indefensible. It commits us to the supposition of a duplicate for every object of perception. If when I perceive a table, I have no direct experience of the table as a physical object and still have no doubt that I do perceive a table, then I am to say that the perceived table is an appearance of the real table. But on this view of the physical object, as explained before, we cannot attribute the sense-data of colour, sound, touch, etc., to the physical object. If this be so, we do not find any sense in calling it a table or even a physical object. A table and, for the matter of that, a physical object cannot be regarded as physical unless it possesses some physical properties like colour, shape, etc. Of course, it may be said that the physical object *resembles* some sense-data in respect of the primary qualities like shape. But if the physical object is not directly known, we cannot possibly compare it with sense-data and say wherein the two agree and wherein they differ. We cannot even know that there is a physical object at all. Hence either we must say that the physical object is just the perceived object, i.e. something which is qualified by sense-data, or we should not speak of the physical object at all.

H. H. Price¹ makes a thorough examination of the relation between sense-data and matter or a material thing. By a material thing he means just what we have called the object and cited tables and chairs as instances of. To quote his own words, "A material thing is such an entity as a tree, a rock, a table, a cat". According to him, a material thing is neither a group of sense-data, or as he calls it, a family of sense-data alone, nor the physical object alone, but something which consists of both. It is a group or family

¹ Cf. *Op. cit.*

of sense-data *together with* the physical object which is coincident with it. This complex object is the material thing. Phenomenalism identifies it with the group of sense-data alone, while the Causal Theory identifies it with the physical object only. To guard against the errors of both Price proposes to call the complex object 'the complete thing' or 'the total object'. The complete thing then, is the physical object together with a family of sense-data. The physical object is the 'physical occupant' with causal characteristics. Mere sense-data cannot take the place of a material thing. A group or family of sense-data may have all the spatial characteristics of a material thing, like shape, size, position, etc. Like the latter, it may endure through time and include different kinds of sense-data of the different senses. It further resembles a material thing in being common to many observers and independent of them all. There is one point, however, on which a group of sense-data cannot resemble a material thing. Like the latter it cannot *physically occupy* a place or region, although it may *sensibly* occupy it. A place is physically occupied when it does not allow anything to pass through it or resists the attempt of anything to pass through it. Now this means that the place has certain causal powers or characteristics, like resistance or impenetrability. But if a place has causal characteristics, it is a substance, and not merely a place; and since the causal characteristics are physical, it is a *physical* substance. It cannot be a group of sense-data. Hence a physically occupied place must be a physical occupant with causal characteristics because such a group has no causal characteristics; and this is the physical object. With regard to the physical object we do not know anything more than that it is a causally-characterised something. We can also say that it has such and such a size, shape and position. But these are only relational characters which do not consti-

tute the intrinsic nature of that which has those characters. That the physical object has some intrinsic qualities is no doubt true, but we have no means of knowing them. Science cannot tell us anything about them, for it is concerned only with the causal characteristics of complex objects.

The other constituent of a material thing is called ~~the~~ family of sense-data. A family of sense-data may be simply described as a system of actual and obtainable sense-data. It is primarily visual and tactual, but sense-data of other kinds are also included in it. A certain small group of visual sense-data within this collection or group fit together to form a *single solid*, i.e. taken together they form a closed three-dimensional surface, totally enclosing a certain region. This single solid is called the *nuclear solid*, by reference to which we may order and arrange other sense-data. The nuclear solid, when properly rectified, serves to unite the whole collection of sense-data. As such, ~~it~~ may be called the *Standard Solid* of the whole system, and its shape may be called the *Standard Figure*—'standard', because it is what all other series of sense-data deviate from in different degrees and different manners. A collection of sense-data so unified, consisting of a standard solid together with an indefinite number of deviating series, is called a family of sense-data.

Now let us see how, according to Price, a sense-datum belongs to a material thing, and how a family of sense-data is related to the material thing which is not identical with a physical occupant or physical object. A pure physical object is something so shadowy that we can scarcely conceive of it at all. In order to form any definite idea of it we have to conceive it to be related to certain families, with whose members we are actually acquainted

in sense. That a particular sense-datum belongs to a certain material thing means (1) that it is a member of a family of sense-data, (2) that the family is coincident with a physical occupant, and (3) that the material thing consists of the family and the physical occupant in conjunction.

Price calls this theory the *Collective Delimitation Theory*. 'This name', he says, 'lays stress upon two most important points: that the primary relation is one between an entire family and a material thing, the relation between an individual sense-datum and the thing being derivative; and that the family is related to the material thing by delimiting or coinciding with the physical portion of the thing, i.e. the physical occupant'.

Price's theory of the relation between sense-data and the object or the material thing, as he calls it, seems to be better than any other we have considered so far. He accepts neither the causal theory which reduces the material thing to the physical object, nor the Phenomenalistic view which identifies it with a group of sense-data. He considers both the views to be erroneous and would rather prefer the second, if he has to choose between the two. He makes an attempt to avoid both and gives us a somewhat new theory. But on a careful examination, this theory is found to have certain difficulties and seems to require some modification. On this theory, a material thing is the conjunction of a family of sense-data and a physical object with which the family is coincident. But it is difficult to understand how the family of sense-data can coincide with the physical object which is so shadowy that we can hardly conceive of it at all. We are told that the physical object is a physical occupant with causal characteristics. We have to accept the physical object because we find that a certain place or region is physically occupied, and it cannot be physically occupied unless certain causal characteristics are manifested in it,

especially, unless it be impenetrable. But to have causal characteristics or to be impenetrable is not necessarily to be a physical object. We may very well understand how some power or force may resist other things in a certain region and yet be not a physical object. A physical object must somehow be a visuo-tactual solid, i.e. it ~~must~~ have some shape and size. But as Price himself admits, there may a physically occupied region having in it no visuo-tactual solid accessible to human senses, e.g. the region occupied by an electron. Further, the spatial characteristics like shape, size, etc. without which an object cannot be said to be physical, are not, Price tells us, the *intrinsic qualities* of physical objects; they are only relational. So if it be true that we do not definitely know anything more about physical objects than that they are entities with causal characteristics, then it is better not to call them physical at all. Of course, Price admits that if we know more about the things which have these causal characteristics, then a description of them as physical might appear very inadequate, though not false. But it seems to us that the description would be false. For if the physical characteristics of shape, etc. are not the intrinsic qualities of certain things, or if we find other characteristics in them, there is perhaps no justification for calling them physical objects.

Now let us see if there can be any coincidence between such a physical object and a family of sense-data. For all we know, the two cannot coincide. The one is a merely causally-characterised something having no spatial characteristics intrinsic to it. The other is a unified group of sense-data not only having spatial characteristics but also including other kinds of sense-data like tastes, sounds and smells. How two such different things, one with a structure and the other without it, can coincide we do not under-

stand. Further, the material thing does not appear to be a conjunction of the two. When I perceive a table it does not seem that I know a particular family of sense-data as only conjoined to or coincident with a physical occupant. If it were so, a perception of objects like tables and trees would be very difficult for plain people who do not know anything about their coincidence. The actual facts of the matter rather seem to be as follows. When we perceive a table we know certain sense-data or sense-qualities as *characterising* something, and not as coinciding with the physical part of that thing.

This leads us to another view of the relation between sense-data and the object or the material thing. As we have already shown, sense-data are psycho-physiological in the sense that they depend on our mind-body or the organism. They appear and are experienced because our organism reacts to the influences of some reality outside in certain specific ways and manifests it as having certain sense-qualities like colour, sound, touch, etc. The object of perception is this reality or this something apprehended by us in sensation as coloured, sounding, hard or soft, etc. We have no object unless and until the sense-data are taken to characterise or qualify something. What this something is in itself we do not know by means of our senses. For the senses, it is an object or a material thing. So we may say that the object or the material thing is this something apprehended in sensation as coloured, shaped, and so on. We perhaps know of no other object than this. Even the physical occupant, as conceived by some philosophers, is, or at least, should be regarded as, an object of this *kind*, if not exactly like it. For what physical space or physical occupancy means cannot be understood except in terms of sense-data and their relations. Hence we may say that all objects, including a physical occupant, are cons-

stituted by sense-data with reference to something or some reality. Of course, all sense-data cannot be said to constitute material things or objects. It is only a group or family of sense-data, or simply some standard sense-data that are the constituents of certain things. Thus an object like a table is constituted by a group of standard colour, shape, taste, etc., which are taken to characterise something and are regarded as its qualities. What Price says with regard to the nature of sense-data also seems to suggest a somewhat similar view. 'Sense-data', he says, 'are those vital processes in which, on the reception of physical stimuli, the animate organism displays external objects to itself; and that a visual sense-datum is the animate organism displaying material objects to itself colouredly and expandedly; and that a smell is myself (i.e. my own nervous system) making objects manifest to myself in an odorous form'. But here it should be pointed out that we have, properly speaking, neither what are simply objects nor material objects unless colours, shapes, smells, etc. are manifested by the animate organism. So instead of saying that objects are manifested by the organism as coloured and smelling, we should say that they are constituted by colours and smells as manifested in something by the animate organism and referred to it as its qualities.

We may now explain briefly the perception of objects. Perception is the immediate or direct knowledge of an object. But this its immediacy does not seem to extend beyond a minute part of the object perceived. We see some colour, but perceive a whole tree. It is only the colour that is sensed or intuited; but the whole tree is not actually sensed. The tree is something which has many parts, other than that of which we see the colour; and it has many other qualities than green colour. If, therefore, we perceive, i.e. immediately know a tree, it would seem that there is an

intuitive knowledge of what has not been actually intuited. Price calls this the *pseudo-intuitive* character of perception and takes great pains to explain it. But he does not really explain it when he suggests that because we fail to distinguish the intuited sense-datum from the remainder of the thing, ~~the~~ whole thing is *as if* it were intuited. We ~~are~~, so thinks Price, the power of accepting the whole thing just when a sense-datum is sensed by us. We have also the power of conceiving the concept of "thinghood" or "material thinghood" along with that of perceptual acceptance. This is an ultimate element in human nature. But what is thus perceptually accepted may be, and generally is, confirmed by further specification processes which reveal the same object that we first accepted. From our standpoint the perception of the whole object may thus be explained. As we have seen before, the ultimate datum of all knowledge including perception is being or existence. When we sense a sense-datum we are in immediate touch, so to say, with an ~~existent~~ of a particular nature. That it has a particular nature may be doubted, although ordinarily it is not. But that there is some existence cannot be doubted. So we may say that existence is the pure datum of sensation. Now the specification of this datum as a particular existent like colour, smell, etc., and the further specification of it as *something* coloured, smelling, etc., is due to our mind-body or the animate organism. It is the body with the sense-organs that manifests colours, sounds, smells, etc., when it specifically responds to the influences of a reality existing outside. And it is our mind, or more especially our understanding that presents these colours, sounds, etc., as the qualities of individual objects like a chair, a table, a tree. Thus it comes about that we have the perception of objects when we receive certain influences from an enviring existence or being *as such*.

How we come by such and such sense-organs and such a mental constitution is a question into which we need not enter here. In Chapter VI we have tried to explain the elements and processes involved in the presentation of the objects of knowledge in general. In the light of our previous analysis we may just say that there is ~~is~~ synthesis of sense-data like colours etc. by our understanding and ~~the~~ the object is what it is because our mind or understanding synthesises sense-data into the form of objects. Therefore, objects are, in a sense, constructed by our mind-body. But since the synthesis of sense-data is not a matter of choice for us, but is due to the constitution of our mind-body, and also because there is in us neither an effort of will for nor any consciousness of the synthesis, it is, for all practical purposes, a standing fact, a sort of standing awareness of objects. And this standing awareness is the perception of objects.

THE NATURE AND TESTS OF TRUTH AND ERROR

'Our knowledge of things or ordinary objects of the is generally expressed in the form of judgments or propositions. Truth and error are characters of judgments or of propositions which are verbal expressions of judgments.¹ If there be any knowledge of any thing, which is not or cannot be expressed in the form of judgments, then that knowledge cannot be said to have the character of truth or falsity in it. A bare sensation of or mere acquaintance with sense-qualities like colour and sound is not a judgment of them either *as* qualities of anything or even *as* sense-qualities i.e. *as* colour and *as* sound. In the case of a new-born babe we have perhaps such bare sensations of colour and sound, but no judgments about them. Hence the first cognitions of a baby cannot be said to be true or false. On the other hand, if there be any transcendental knowledge which is pure consciousness or pure experience in the sense that there is in it no distinction of subject and object and, therefore, no judgment, then that

¹ It should be noted here that the mathematical logicians make a distinction between judgment and proposition. For them, a judgment is the *act* of affirming or denying a proposition, while a proposition is *what* is affirmed or denied in the judgment. In simpler words, a judgment is an assertion about something or some fact, and the proposition is what is asserted (i.e. affirmed or denied) about that thing or fact. Thus when I say "the rose is red", I make an assertion about something or some fact, and the content of my assertion or the matter asserted by me is the proposition '*the rose is red.*' This proposition is here expressed in an English sentence, but it may be expressed in Bengali as well. We have, however, followed the traditional view in taking a proposition as the verbal expression of a judgment, for a distinction between the two, as made by the mathematical logicians, is unnecessary for our present purpose and undesirable for the sake of simplicity.

knowledge also cannot be said to have the character of truth. Of course, there is a sense in which we can speak of it as absolute or transcendental truth. But that truth does not come within the scope of our present philosophical discussion. In considering the problem of truth and error, we shall be concerned with such cases of empirical knowledge as are judgments or are expressed in word-propositions.

* A judgment is an assertion about something which claims to be true, but may be false. To judge something is to consider it *to be* such-and-such or *not* to be such-and-such. A judgment may thus be affirmative or negative. It may either affirm or deny that a thing is such-and-such. But in each case it claims to be true. It proceeds on the understanding that what is affirmed or denied in the judgment is true, or that it is the real fact. Where in knowledge there is no such claim to be true, there is no occasion for truth and error. Doubt as a mental state is, neither true nor false, because one who is in doubt does not claim that his doubt gives him the truth of the matter he doubts. Rather, he is in doubt as to what the truth of the matter may be. * Now a judgment being a definite assertion that a thing is or is not such-and-such, no doubt claims to be true; but it may be true as well as false. Now the questions we are to consider here are: What *makes* one judgment true and another false? What do we mean by the truth and falsehood of judgments? How, again, do we *know* that one judgment is true and another false or erroneous? It will be seen that with regard to truth and error there are two main questions, namely, how truth and error are constituted, and how they are known or tested. The first question relates to the nature of truth and error, and the second to the tests or criteria of truth and error.

There are four main theories of truth and error which

bear on these two questions. These are known as the intuitionist, the coherence, the pragmatist, and the correspondence theory of truth and error. In this chapter we shall consider these theories.

The Intuitionist Theory

According to the intuitionist theory, while truth is intrinsic to one kind of knowledge, error or falsity is intrinsic to a different kind. This means that some cases of knowledge are intrinsically true, while others are intrinsically false, so much so that we immediately apprehend the truth of the one class and the falsity of the other. So far as ordinary empirical knowledge is judgmental, i.e. takes the form of judgments, we may say that on the intuitionist theory we are said to apprehend immediately that some judgments are true and others false or erroneous. To the question, 'How do we know that a belief is true?' the older intuitionists like Descartes, Cudworth, Thomas Reid and Spinoza have a simple answer to give, namely that we know it immediately to be such. As Hobhouse puts the matter: "Intuitionism has a royal way of cutting this, and indeed most other knots: for it has but to appeal to a perceived necessity, to a clear idea, to the inconceivability of the opposite, all of which may be known by simply attending to our own judgment, and its task is done".¹ Thus the truth of all our normal waking perceptions, of a conclusion following from given premises, of the belief in the external world is said to be directly apprehended by us just when we attend to our judgments about them. On the other hand, we know no less directly that in illusion, dream and fancy we are in error, and that such judgments as 'there are two moons in the sky', 'two parallel lines can meet' are entirely false.

¹ Cf. L. T. Hobhouse, *Theory of Knowledge*, p. 488.

Among modern intuitionists, Lossky tries to show that truth and falsity are known through an immediate consciousness of their objectivity and subjectivity respectively. For him, truth is the objective and falsity the subjective appearance of an object, and the one is known as much directly as the other. The appearance of a conch-shell as white is objective and so true, while its appearance as yellow is subjective and, therefore, false, and we have an immediate consciousness of their objectivity and subjectivity, and so of their truth and falsity respectively. To quote Lossky's own words: "It is in this consciousness of objectivity and subjectivity and not . . . in the laws of identity, contradiction and excluded middle, that our thought has a real and immediate guide in its search for truth".¹

Among the Indian systems of philosophy, we find that the Sāṅkhya system accepts the intuitionist theory in respect of both truth and error, while the Mīmāṃsā and the Advaita Vedānta systems accept it in the case of truth, but reject it as regards error.² According to the Sāṅkhya, both truth and falsity are internal characters of different cases of knowledge. If one knowledge is true and another false, that is so because of their own internal conditions and without reference to any external tests like correspondence, coherence, etc. Truth is latent in some cognitions and error in others, from the very first moment of their occurrence, and these are immediately apprehended by us at that moment. A true cognition is true and known to be true by itself, and it can never be made false, just as colours like white and black are perceived by themselves and one cannot be changed into the other. Thus the Sāṅkhya holds

¹ Cf. N. O. Lossky, *The Intuitive Basis of Knowledge*, pp. 227-29.

² For a fuller account of the Indian theories of svataḥ prāmāṇya and parataḥ prāmāṇya vide the author's *The Nyāya Theory of Knowledge*, ch. V.

that both truth and falsehood are internally conditioned and immediately known. This is the theory of svataḥ prāmāṇya and aprāmāṇya, i.e. the intrinsic validity and invalidity of knowledge. The Mīmāṃsā and the Advaita Vedānta, however, take truth as intrinsic to all knowledge (svataḥ prāmāṇya), and error as an abnormal phenomenon due to certain external and vitiating factors in the conditions of some cognitions (parataḥ aprāmāṇya). Knowledge is the manifestation of an object, and so it cannot *be*, unless it manifests its object truly. Any cognition is true so far as it reveals its object; and it is immediately known to be true so far as it is uncontradicted (abādhitā). The absence of contradiction, however, is not a positive but a negative condition of truth. Knowledge is both made true and known to be true by its own internal conditions. While truth is intrinsic and organic to knowledge, falsity or error is accidental and externally conditioned. Thus the falsity of some cognitions is due to some defects in the conditions out of which they arise. It is only when certain defects vitiate its natural conditions that a cognition fails in its purpose, namely, the attainment of truth. A visual perception becomes false when its normal conditions are vitiated by disease, darkness, etc. Just as a cognition is made false by certain external conditions, so it is known to be false from such external conditions as the experience of contradiction and the knowledge of vitiating conditions. The falsity of the perception of silver in the mother-of-pearl is detected by us when it is contradicted by the subsequent experience of the oyster-shell. Thus error or falsity is externally conditioned, and indirectly known by us, but truth is conditioned internally and known by us intuitively. In the writings of Professor L. A. Reid, a modern realist who owes no allegiance to the current schools of realism, we find a close approach to the

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intuitionist doctrine of truth as advocated by the Mīmāṃsā and the Advaita Vedānta. He holds that truth is organic to knowledge and is nothing else but knowledge doing its job. Thus he says: "Truth is, indeed, simply, . . . the quality of knowledge perfectly fulfilling its functions." He says further: "If knowledge were not transparent, if it were not in direct contact, joined with reality, then all our ~~truth~~ coherence, correspondence, and the rest, would be worthless".¹ This means that truth is a natural function of knowledge and requires no external tests in order to be known, i.e. it is known quite directly or intuitively.

It should be remarked here that the intuitionist theory gives us a rather cheap and simple solution of the logical problem of truth and error. If one knowledge is made true or false and also known to be true or false by itself, we do not understand how there can be any room for doubt or error in the sphere of knowledge. Nor, again, do we see how there can possibly be contradictions, disappointments and failures in human life. ~~the~~ the cognition of an object is true and known to be true just when we have it, we cannot have any doubt about the object in our mind. Or, if it be false and also known as false from the beginning, we should be credited with the truth about it and should not be tormented by any doubt. If this is so, we are in possession of the truth in either case, and we should never face untruth and uncertainty in our life. But 'to err is human', and to doubt is no less so. Again, truth and error being self-evident and immediately apprehended, why should there be any contradiction between the experiences of different persons or those of the same person? If every cognition of objects assures us of its truth or falsity, there would be no occasion for any conflict between two cognitions or for difference of opinion between two persons. For,

¹ Cf. L. A. Reid, *Knowledge and Truth*, pp. 185, 199, 204.

once a cognition or an opinion is found, and by hypothesis it is *always* found, to be false, no one would oppose it to true knowledge which also is self-evident to all of us. If one does so, one may be said to lie, but not to be liable to error. Further, if both truth and error be immediately known by ~~us~~, then there cannot be any unsuccessful

ity or failure in our life. For, if we act on the basis of true knowledge of an object we are bound to attain it, and if we know that we are in error we should make no effort to obtain it. In either case there must not be any disappointment or failure in life. But these are so common and frequent experiences of life that we cannot afford to ignore them, however much we may try. Finally, the intuitionist theory seems to make a confusion between psychological belief and logical certainty. Psychologically a wrong belief may be as firm and objective as a right one. But this does not mean that there is no distinction between the two. Subjective certitude or consciousness of objectivity, as such, ~~cannot~~ be accepted as a test of truth. It is true that the intuitionist theory does not appeal to any test of truth and error other than these or an immediate consciousness of them. It assumes that truth and error are equally self-evident in so far as we have an immediate consciousness of them. In fact, however, there seems to be no such self-evident truth or error. It is only in the case of the self that we can speak of self-evidence in the strict sense. The self is a self-manifesting reality. It is manifest even in any doubt or denial of its reality, for the self at least must first *be*, if any doubt or denial is next to *be*. Hence self-evidence belongs really to the self only. It is on the analogy of the self that we speak of the self-evidence of any truth or error. A truth or an error is self-evident in so far as it has the evidence of the self or is evident like the self. But, as we have just said,

there is no such self-evident fact other than the self itself. In the case of any truth or error we can always think of the opposite in a sensible way. That 'two and two make five' is as much thinkable as that 'two and two do not make five'; neither of them is as nonsensical as 'abracadabra'. Even if the opposite of a certain belief be ~~in~~conceivable, it does not follow that the belief is infallible. What was ~~once~~ inconceivable is now not only conceivable but perfectly true. It is in this way that some so-called self-evident truths are now found to be errors, and some so-called self-evident errors are now found to be truths. Hence we cannot accept the intuitionist view and say that truth and error are intrinsic to and self-evident in any knowledge of objects, or in any judgment in which it is expressed. As a general theory of truth and error, the intuitionist doctrine fails, although it may be said to have a limited application in the sphere of self-consciousness. We shall return to this point later on.

2. *The Coherence Theory*

The coherence theory of truth occupies an important place in idealistic philosophy, especially in the absolute idealism of Hegel and the Hegelians like Bradley and Bosanquet. It has also been accepted by certain logical positivists like Neurath and Hempel. But there is a fundamental difference between the Hegelian and the logical positivist form of the coherence theory. The one may be called metaphysical or absolutist, and the other logical and relative. So we have to distinguish between two forms of the coherence theory.

Let us consider first the logical positivist theory of coherence. This can be more easily explained in the light of the ordinary idea of coherence which we find among

many realistic thinkers. While the realists generally accept the correspondence theory of truth, some of them use coherence as a test or criterion of truth. According to them, truth must be defined by correspondence to fact, but may be tested by coherence. Now coherence as a criterion of truth may mean the agreement of one kind of experience

those of a different kind, or it may mean the consistency of one belief or judgment or proposition with others so as to form a system. The idea of *samvāda* which is accepted as a test of truth by some Indian logicians brings out the first sense of coherence as agreement among different kinds of experiences. Thus the visual perception of an object is found to be true when it coheres with, i.e. agrees with, the tactual and other kinds of perception of the same object. The second idea of coherence as the logical consistency of beliefs or judgments in a system is endorsed by Bertrand Russell and Professor L. T. Hobhouse. The former rejects coherence as the definition of truth, but admits that it may be used as a criterion in the case of probable opinion. He says: "A body of individually probable opinions, if they are mutually coherent, become more probable than any one of them would be individually. It is in this way that many scientific hypotheses acquire their probability. They fit into a coherent system of probable opinions, and thus become more probable than they would be in isolation". Similarly, general philosophical hypotheses, which when taken singly seem to be highly doubtful, become pretty nearly certain when we consider the order and coherence which they introduce into a mass of probable opinions. But the test of coherence, Russell tells us, though it increases probability, can never give absolute certainty, unless there is certainty already at some point in the coherent system.¹ Professor L. T. Hobhouse also

¹ Cf. *The Problems of Philosophy*, pp. 217-19.

means this sort of coherence by what he calls 'consilience' and accepts as a measure of validity. According to him, validity belongs to judgments as forming a consilient system.¹ The late Professor Samuel Alexander seems to use coherence in a similar sense as the criterion of truth. According to him, the only way in which the truth of one belief or proposition is to be tested is by reference to ~~other~~ beliefs or propositions. For him, 'truth and error depend in any subject-matter on whether the reality about which the proposition is conversant admits or excludes that proposition in virtue of the internal structure of the reality in question; this truth is apprehended through intercourse of minds, of which some confirm the true proposition and reject the false; and truth is the proposition so tested as thus related to collective judging'.² This means that the truth of a proposition is determined by its coherence with other accredited propositions already established in our social life, although it is correspondence with reality that constitutes the truth or reality of the proposition. The agreement of many minds in the belief that 'the rose is red and not white', does not *make* the rose red, it only *follows* that reality. But their agreement makes the belief 'the rose is red' true, and the belief 'the rose is white' false.

From the ordinary idea of coherence one passes to the coherence theory of truth when one accepts it as both the definition and the criterion of truth. This is what we find some logical positivists like Neurath and Hempel to do in one way and for one sort of reasons, and the Hegelians in another way and for different reasons. The logical positivist's theory of truth developed from a correspondence theory into a coherence theory. The early logical positivists were in favour of defining truth by correspondence

¹ Cf. *The Theory of Knowledge*, pp. 499-500.

² Cf. *Space, Time and Deity*, V. II, p. 252.

to fact or experience. But according to these later logical positivists, the truth of a proposition does not consist in correspondence to reality, for we can never compare reality with propositions. Nor does it consist in correspondence of the proposition with experiences, for a logical theory of truth is not concerned with the experiences of individuals, but with the forms of propositions. In logic and mathematics we see how truth is discoverable by studying the *form* of the proposition concerned, and there is no need to go outside to something that the proposition "means" or "asserts", i.e. to facts or experiences indicated or expressed by the proposition. For the earlier logical positivists, philosophy is the logic of science and its function is the logical analysis of the concepts and propositions involved in the sciences. But for these other logical positivists like Neurath, Carnap and Hempel, philosophy is the 'Critique of language' and its function is the logical analysis of sentences and words. They are of opinion that truth is a syntactical concept, and a proposition is true within a given system, if it is consistent with the rest of the system. 'There is no such process, according to them, as deriving the truth of a proposition from some non-verbal occurrence as an empirical fact'. To say: "an empirical fact A occurs" is to say: "the proposition 'A occurs' is consistent with a certain body of already accepted propositions".¹ Philosophy is limited to the world of words which is a closed self-contained world, and it need not concern itself with anything outside it. Hence the truth of a proposition consists in its coherence with other propositions in a given system of propositions. Of course, there may be different systems of propositions, which may not be consistent with one another, so that a particular proposition which is true in one system may be false in another. Thus we see how

¹ Cf. Russell, *An Inquiry into Meaning and Truth*, pp. 140, 148.

some logical positivists accept coherence as both the definition and the criterion of truth, and with this we have one form of the coherence theory of truth.¹

The logical positivist theory of coherence is the outcome of the peculiar conception of philosophy as the logical study of words and sentences only. Apart from the difficulties in which such a narrow concept of philosophy is involved, are to observe that the theory fails to explain properly the problem of truth itself. So far as logical and mathematical truths (which express necessary relations between certain universal concepts) are concerned, it may be admitted that these are dependent on the formal consistency of propositions in a certain system. But with regard to empirical truths about matters of fact, it can hardly be said that these are made true by mere logical consistency of the corresponding propositions in a system. An empirical fact like rainfall occurs, not because the proposition 'it now rains' is consistent with a system of propositions. There is an obvious distinction between this proposition and the event or its experience which causes or justifies it. Further, if a proposition is true within a given system, but false in another, inconsistent with the first, we do not know whether to call it really true or false, or both true and false with reference to the possible systems. Finally, while a proposition is true in a given system if it is consistent with the rest of the system, what is it that makes the rest of the system or the system as a whole true? Are we to say that these are true by themselves? If so, we give up the theory of coherence. Or, if we refer to other systems and explain the truth of the first by its consistency with them, we are involved in an infinite regress. Hence we must say that there is but one

¹ The account of the logical positivist's theory of coherence given here is mainly based on Russell's *An Inquiry into Meaning and Truth*, ch. x.

system which is the totality of all possible systems and is true in and by itself. But this also means that we have to abandon the logical positivist theory of coherence.

Next we come to the Hegelian form of the coherence theory. It is, as we have already said, absolutist and metaphysical. It differs from the logical positivist theory on ~~the~~ important points. Here coherence which is the essence of truth is not, as with the logical positivists it is, mere logical consistency ; it is not the 'consistency' of formal logic which may characterise a system of thought and make it valid, but not true. A system of thought may be formally consistent but materially false, and, therefore, not true. Further, the Hegelians do not admit with the logical positivists that there are different systems of truths which may be inconsistent with one another, so that a proposition which is true in one system may be false in another. Nay more, the ideal of knowledge for the Hegelians is 'a system, not of *truths*, but of *truth*'. For them, 'truth in its essential nature is that systematic coherence which is the character of a significant whole, and a significant whole is an organised individual experience, self-fulfilling and self-fulfilled'.¹ It follows that there can be but one system of truth as the organised unity of all experiences in one self-maintaining and all-inclusive whole. And since this whole is itself an individual experience which is self-fulfilling and self-fulfilled, we are to say that it is nothing other than Absolute Experience. We can, of course, speak of other truths in so far as there may be more or less coherent wholes formed by different kinds of human knowledge, which reveal Absolute Experience in different degrees. Hence different kinds of human knowledge will be but different degrees of truth. None of them gives us the truth or absolute truth ; nor

¹ Cf. H. H. Joachim, *The Nature of Truth*, p. 76. In this book the coherence theory of truth is worked out from an Hegelian point of view.

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¹ Cf. H. H. Joachim, *The Nature of Truth*, p. 76. In this book the coherence theory of truth is worked out from an Hegelian point of view.

should any of them, even if it be erroneous, fail to give some truth, since it is contained within and somehow refers to the Absolute. Hence all human errors may be said to be partial truths.

The coherence theory of the Hegelians is a part of their idealistic metaphysics. On the theory of absolute idealism there can be no self-existent facts, independent of experience or thought. While the realists believe that facts are independent of knowledge or experience, the idealists maintain that they depend on knowledge and are made what they are by the knowing activity of mind. Facts are not given as self-existent entities, but are constructed by the mind as the objects of its knowledge. Hence the truth of knowledge cannot be said to consist in its correspondence to independent facts which nowhere exist in the world. Just as the existence of a fact is relative to the mind, so its nature depends on its relation to other facts. To know one fact we are to know other facts related to it. If there can be no self-existent facts, there can also be no independent truths. Realism proceeds on the assumption that each of our judgments or experiences represents an independent fact and is, therefore, true independently of all other judgments. The perception of a table, for example, is true independently of our knowledge of all other objects of the world, only if it really corresponds with the table. But, on the idealist view, the nature of a table depends on its relations to other objects like chairs, benches, etc. The perception of a table has a necessary reference to the knowledge of other objects. Hence no perception or knowledge can be true independently of other forms and kinds of knowledge. Rather, the different kinds of knowledge will be true if they form a systematic and coherent whole. The ideal of knowledge is the systematic coherence of all knowledge, perceptions and the rest, in

an organised whole which is self-justifying or self-sustained. Since, however, no case of ordinary knowledge is found to be self-dependent and self-justifying, we are to say that it is a partial truth. The more systematic and comprehensive a knowledge is, the more true it becomes, and the less coherent and exclusive it is, the less true, i.e. false it should be judged to be. The complete truth is the whole of knowledge which is as comprehensive and consistent as possible, i.e. is all-inclusive and self-justifying. It is the completely individual, self-sustained, significant whole. It is the ideal of absolute truth by reference to which the absolute idealists measure the relative degrees of truth in the various systems of judgments and, through them, in the single judgments. If we could but reach this system of absolute truth, there would be no necessity to refer to anything beyond to explain the system as a whole or the relative truths contained within the whole. But this system is not a sum of truths nor a fixed structure built by relative truths. It is a dynamic whole which is but partially fulfilled in the totality of human knowledge. It is the Absolute which is an eternal, self-fulfilling and self-fulfilled life. The Hegelian idea of coherence thus leads finally to that of Absolute Experience.

There is no hope or possibility of realisation of the ideal of absolute truth by any man, however powerful or penetrating his intellect may be. But if we are not in possession of absolute truth, whatever we know gives us some truth. Even in our imaginations and errors we have truths that are partial and incomplete, for these are all contained within the Absolute. As Bradley says: "Error is truth, it is partial truth, that is false only because partial and left incomplete. The Absolute *has* without subtraction all those qualities, and it has every arrangement which we seem to confer upon it by our mere mistake. The only mistake

lies in our failure to give also the complement".¹ Just as there can be no absolute truths, but the Absolute, so there can be no mere errors. On the realistic view, any knowledge is either wholly true or wholly false. That is, there are perfect truths on the one side and sheer errors on the other. But for the Hegelians, the distinction between truth and error is one of degree. What we call an error is further removed from the absolute and requires a greater adjustment than a truth to find its place in Reality. But it cannot be mere error or utterly false, for 'there is no possible judgment the predicate of which can fail somehow to qualify the Real'.² While all the truths which we possess are incomplete and therefore partially false, all our errors are partial truths in so far as they somehow qualify Reality. When we qualify a thing by a predicate which does not harmonise with it, we are said to be in error. But even here the predicate somehow qualifies Reality, for it falls within Reality which is the ultimate subject of all predication. In the light of this we can understand how these so-called errors are not mere errors but partial truths. As Bradley says: "In general every error contains some truth, since it has a content which in some sense belongs to the Universe. And on the other side all truths are in varying degrees erroneous".³

Whatever may be the merits of Absolute Idealism as a metaphysical theory, the coherence-notion of truth which is connected with it seems to be hardly satisfactory as a logical theory. The Hegelians who are the upholders of this theory tell us that from the standpoint of the Absolute all contradictions are solved and all errors are turned into truths. If this be so, then the logical distinction between

¹ Cf. Bradley, *Appearance and Reality*, pp. 169-70; cf. also pp. 320-21.

² Cf. Bradley, *Essays on Truth and Reality*, p. 252.

³ Cf. Bradley, *Essays on Truth and Reality*, p. 257.

truth and error loses all ground, for everything including evil and error becomes significant and salutary and there can be no evil or error in the world. But the Hegelians can hardly accept this position. For Bradley, the Absolute is a non-relational reality and has of course no degrees. But how such a reality can contain relational wholes like finite ~~points~~ and selves, and how again it can embrace degrees of truth, we do not and cannot understand. It would perhaps be more consistent for the absolute idealists to say not only that all things are appearances, but also that all appearances are negated in the Absolute. On this view also the logical distinction between truth and error cannot be maintained from the standpoint of the Absolute in which everything is negated. If it be said that the distinction is maintained from the standpoint of the relative or the human standpoint, then we are to say that truth and error are human affairs in the discussion of which the Absolute need not and should not be introduced. If we do that, the distinction between them becomes blurred and infructuous. As the Hegelians themselves admit, all human truths are partial errors and all errors are partial truths. If human truths and errors are alike partially true and partially false, there is no real distinction between them. As such, the coherence theory fails to explain the distinction between truth and error, and is so far unsatisfactory.

It seems to us that the question of truth and error is an empirical question to be decided on empirical grounds. Of course, there is a sense in which we can say that truth is identical with Absolute Reality. But then, the question of truths and errors will not arise. This question arises in our empirical life which is confronted with an apparently independent world of objects that are variously related to the interests of our life. The question as to the ultimate

reality of this world or of our life in it is beyond the scope of a logical theory of truth and error. With a world of objects given to us in the way in which it appears to be given, the question is: when is it that our knowledge of objects is true and when again is it false? The answer to this question depends on what we mean by ~~truth~~ and error. One of the things that we do and must mean is that ~~our~~ knowledge must be self-consistent, i.e. its different constituents must not contradict one another. In other words, knowledge is true when it constitutes a system of which the different parts are consistent with one another, i.e. are logically coherent. But this coherence is only one aspect of truth which has also other aspects. What is true is not only self-consistent, but also consistent with facts. The latter aspect of truth points to the correspondence theory which we cannot ignore in a comprehensive theory of truth. Joachim admits that a relative justification of the correspondence-notion of truth is implied by the very nature of thought to which the ~~relative~~ independence of subject and object is essential. That the correspondence theory has a relative validity is also admitted by Bradley when he says that 'the absolute view of error, on which some ideas are quite true and others quite wrong (which is an aspect of the correspondence theory) holds good in limited spheres and for some working purposes'.¹ The same thing, we say, is true of the coherence theory. In some spheres of knowledge and for some purposes, it holds good; but in other spheres and for other purposes, it does not. The ideal of absolute truth of the Hegelians, for example, as a self-fulfilling and self-fulfilled individual experience, is a self-manifest reality which requires no criterion like correspondence or coherence. Here they postulate a truth which is self-evident and self-certified. It is the

¹ Cf. Bradley, *Essays on Truth and Reality*, p. 252.

Absolute self which is only to be realised in intuitive experience but not to be proved by reasoning. Hence we are to say that the coherence theory has a relative validity along with the intuitionist theory of truth and error.

3. *The Pragmatist Theory*

The Pragmatist theory of truth and error is advocated with great force and ingenuity by William James, F.C.S. Schiller and John Dewey.* It is on the works of these three distinguished men that an authentic account of it should be based. 'All of them agree in their polemic against extreme intellectualism in philosophy, and insist upon the necessity of taking our personal ends and interests into consideration in any adequate theory of truth and error.' There is, however, some difference among them with regard to specific details in the statement of the theory. • So we propose to ~~re~~state separately their views on the problem of truth and error.

William James in his *Pragmatism* states the theory as follows: 'Truth is a property of certain of our ideas. It means their agreement, as falsity means their disagreement, with reality'. But the agreement of ideas with reality does not mean, as it does with the realist or the intellectualist, that our ideas copy reality, or that there is a fixed relation of correspondence between ideas and objects which have a fixed nature and an independent existence of their own. While our ideas of sensible things do indeed copy them, those of their activities or works cannot be said to be copies of them in any sense. • In the case of these ideas, therefore, we cannot say that they are true because they copy or correspond to reality. The truth of ideas depends on their verifiability. "True ideas are those that we can

assimilate, validate, corroborate and verify. False ideas are those that we cannot''.¹ Now to verify ideas is to see their practical consequences. If the ideas lead us, through the acts and other ideas which they instigate, to other parts of experience with which we feel that they are in agreement, i.e. if their connections with those parts of experience are progressive, harmonious and satisfactory, then the ideas become verified. 'This function of agreeable leading is (what an idea's verification means. An idea is not true by itself. 'The truth of an idea is not inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity is in fact an event, a process: the process, namely of its verifying itself, its *verification*'. This means that the truth of an idea is constituted by its verifiability, and its verifiability means its ability to guide us prosperously through experience.) That is, (if by following an idea we can obtain certain experiences which for practical life are useful and valuable, then the idea becomes true; if not, it turns out false.) True ideas thus possess a practical value for us and we should have them for their practical value. (The practical value of true ideas is primarily derived from the practical importance of their objects to us.) The objects are not practically important at all times. An idea whose object is not important for the time being will be practically irrelevant, and had better remain latent. Since however, any object may some day become important, there is obviously some advantage in having such an idea that shall be true of a merely possible situation. When the situation actually arises, the idea becomes practically relevant, it does its work and our belief in it grows active. Of such an idea it may be said either that 'it is useful because it is true' or that 'it is true because it is useful'. Both these phrases mean exactly the same

¹ Cf. *Pragmatism*, p. 201.

thing, namely that (here is an idea that gets fulfilled and can be verified. "True is the name for whatever idea starts the verification-process, useful is the name for its completed function in experience".¹ True ideas would not be considered true unless they had been useful from the outset in this way! An idea becomes true in so far as it leads to ~~main~~ experiences which verify it and it is useful in so far as the experiences it leads to fulfil its function in one's actual life. In the case of a man who seeks shelter from rain, the idea of a house in the neighbourhood becomes true when it leads to the experience of the house and thereby fulfils its function on that occasion.) 'That we have a true thought means that sooner or later we dip by that thought's guidance into the particulars of experience and make advantageous connection with them'.

(Verification by satisfactory experience which makes an idea true need not always be complete. Sometimes we accept our ideas as true even before they start the process of practical verification.) The idea of the clock which I see on the wall is taken as true before I make any use of it or examine its inner working. Similarly, many of our thoughts and beliefs are treated as true when they are found to be consistent with previous truths or when they are not contradicted by anything. But even in such cases we are to say that the process of verification is indirect.) It is because such ideas and beliefs are either based on certain actually verified truths or may, like them, lead to certain verifying experiences, that they are allowed to pass for true. The original and prototype of the process of truth-making is the verification of an idea by experiences and their practical consequences. All other processes of recognising truths may be explained as modifications or indirect applications of this original process. So in the end, all true processes

¹ *Loc. cit.*, p. 204.

must lead to the face of directly verifying sensible experiences somewhere.

(The pragmatic account¹ of truth, it will be seen, is an account of truths in the plural. It does not admit anything like the Truth or Absolute Truth which is a static system in which there is no process or development. For James, truths are only processes of leading which possess only one common quality, namely that they pay.) 'They pay by guiding us into or towards some part of a system that dips at numerous points into sense-percepts which verify them. Truth is simply a collective name for verification-processes, just as health, wealth, strength, etc. are names for other processes connected with life, and also pursued because it pays to pursue them. Truth is *made* just as health, wealth and strength are made, in the course of experience.) (Just as health is a name for certain organic processes as easy digestion, circulation, sleep, etc. so truth is a name for verification-processes by which ideas lead us prosperously through experience.) In short, 'the true is only the expedient in the way of our thinking, just as the right is only the expedient in the way of our behaving.' (But expediency is a matter of degree and is subject to change and variety. What is expedient now in one way and relatively to present experiences, may not be so with reference to other ways and further future experiences. Hence (what is now considered true may afterwards be considered false) Ptolemaic astronomy was expedient for centuries within the limits of experiences then available.) (But now in the light of further experiences, we declare it false or relatively true within those borders of experience.) Truth thus grows from more to more and in this process the superseded truths contribute their quota to the making of higher and larger truths. We may here, of course, conceive the idea

¹ *Loc. cit.*, p. 218.

of a complete truth that will some day be established absolutely. But this truth is by no means the rationalist's absolute truth which is eternally complete and independent of human experiences. Rather, it has, like all other truths, to turn its face to the concrete facts of experience and take all future experiences into account. Like other truths, 'the absolute truth will have to be *made*, made as a relation incidental to the growth of a mass of verification-experience.'¹

(Schiller's theory of truth may be briefly stated as follows. The question of truth is primarily a practical one. Success in practical life depends on our ability to predict the course of events in the world in which our lot is cast. We want to 'discover the truth' that we may be able to predict and control the course of things in the world and thereby make our life better and prosperous. But we must distinguish between a prediction which comes true and one which does not.) We cannot treat them as of equal value. Nor should we rest content with the formal consistency of predictions and of the deductions from them without considering the question of their application to the real. (Predictions which are formally valid but practically inapplicable to reality are only truth-claims, but not truths. Every prediction claims to be true, but it becomes true only when it is attended with success. 'True' thus must be the term for the *positive* value of successful prediction and is opposed to falsity which is the *negative* value of a failure to predict.) This is how the sciences distinguish between the true and the false. A logic, therefore, which is observant of scientific usage must treat 'true' and 'false' as logical values which are analogous to moral and aesthetic values. ('True' and 'false' are the valuations belonging to our cognitive enterprises; 'right' and 'wrong' those applicable to our

¹ *Loc. cit.*, p. 224.

acts; 'beautiful' and 'ugly' those indicative of aesthetic appreciation. The 'true' is the 'good' of knowing, and the 'false' its bad; the one means success, the other failure in a cognitive understanding.)

(A cognition is not a passive mental state which reflects a reality outside or external to it. On the ~~other~~ hand, it is the means or mental way of dealing with the objects ~~referred~~ about us.) The value of a cognition lies not so much in its copying an object, as being the effective means of dealing with it. Hence, no judgment or proposition is true or false in itself; its value is always dependent on its use in the context in which it occurs and bears a meaning.) (So far as the form of a judgment is concerned we may say that there is no distinction between its value-claim and value, or, which is the same thing, between its truth-claim and truth.) Every judgment is a confident assertion and so far lays a claim to value and truth. Now if we go by the form alone and do not consider the question of practical use, all judgments alike are true and none is ~~false~~. Hence, if we are to, as we needs must, make a distinction between true and false judgments that must be by reference to their use or purpose in a certain context. Having regard to this, we cannot equate what *further*s, with what *defeats*, a cognitive purpose and ignore the distinction between positive and negative values, or between the 'true' and the 'false'.) A judgment as such is a truth-claim; but merely to claim the truth, is not to *be* the truth. (It becomes a recognised truth when it undergoes 'verification' or 'confirmation'.²)

(The distinction between truth and truth-claim is not absolute. It is a matter of degree. While a truth-claim is not a *mere* claim without any ground or rational basis, a truth continues to be a truth-claim inasmuch as it may be doubted and modified.) "A verified truth may always be

¹ Cf. Schiller, *Logic for Use*, pp. 95-98, 103. ² *Loc. cit.*, p. 105.

improved and revised by further verification, and no amount of verification ever renders it *absolutely true*".¹ Its truth is relative to the evidence that is available in its favour at the time we raise it to the status of 'truth'. Hence all that we can say is that any truth actually enunciated is to be conceived as the *best* (i.e. most valuable) under the instances. (We cannot treat any truth as absolute, for the process of verification on which it depends can at least theoretically, go on for ever and progressively enhance its value for us. "Absolute truth will then appear, not as a presupposition which has to be granted before we can begin to know, but as the aim and ideal towards which our knowledge moves

John Dewey is most indebted to C. S. Peirce for his logical theory including the conception of truth. It was Peirce who first introduced the word 'pragmatism' into philosophy and gave the outline of a theory which is now known as pragmatism. Hence to understand Dewey's position we shall do well to recall the views of Peirce on the relevant points. (According to Peirce, our beliefs are really rules for action and the significance of a thought for us lies in the mode of conduct that it is fitted to produce. The difference between one thought and another consists in a difference of practice. The thought of an object is just the conception of its conceivable practical effects for us.² The truth of a belief or of an opinion cannot, therefore, mean any fixed relation of its correspondence to a fixed object.) In his later writings, Peirce defines truths as follows: "The opinion which is fated to be ultimately agreed to by all who investigate is what we mean by the truth and the object represented by this opinion is the real."³ (A more

¹ *Loc. cit.*, p. 106.

² *Loc. cit.*, pp. 106-7, 115.

³ Cf. Peirce's article on "How to make our Ideas clear," *Popular Science Monthly*, Jan., 1878. ⁴ Peirce, *Collected Papers*, Vol. V, p. 268.

significant statement made by him with regard to the nature of truth means that it is 'the concordance of an abstract statement with the ideal limit towards which scientific belief tends through endless investigation, the concordance being essentially a matter of recognition of the inaccuracy and one-sidedness of the abstract statement.' (This means that truth is the ideal which we are to attain by endless scientific investigation, and that a particular statement or proposition is true in so far as it is provisionally established by investigation and is open to correction by further investigation.)

(Dewey's theory of truth agrees in the main with that of Peirce as explained above. For him knowledge or truth is the outcome of competent and controlled inquiry or investigation. 'Knowledge is related to inquiry as a product to the operations by which it is produced.' That is, knowledge or truth is the product of the operations which are involved in inquiry. Inquiry is a process of investigation which is evoked by a doubtful situation. It begins in doubt and it terminates in the institution of conditions which remove need for doubt. And as a process it consists in 'the directed or controlled transformation of an indeterminate or doubtful situation into a determinately unified one'. (There are two kinds of operations by means of which the transition is effected. First, there is the formation of ideas as to the possible ways of resolving and ending the doubtful situation. There are certain anticipations of a solution or certain working hypotheses which instigate and direct new observations yielding new factual material. Secondly, there are certain activities involving the techniques and organs of observation. These are experimental operations which modify the prior existential situation, render some conditions prominent, and relegate to the background other aspects which were at first conspicuous.) In this way new facts are provided with which to

the test the ideas that represent possible modes of solution. Ideas and judgments or reasoning as such cannot provide new factual material. Hence the transformation of the original situation must be effected by experimental operations under the guidance of ideas. It is only the execution of 'existent ~~the~~ operations' directed by an idea that can bring

at a transformation of the original uncertain situation into a settled and unified one. When this happens, there is a state of affairs which may be designated by the words *belief* and *knowledge* or *truth*. But these words being misleading, Dewey prefers the words "warranted assertibility" which he substitutes for knowledge or truth. That a proposition is true means, for him, that it is warranted by competent and controlled inquiry. It is better not to use the words *belief* and *knowledge* or *truth* in relation to it. Belief generally means a merely mental or subjective state. But as the outcome of inquiry it is a settled objective state of affairs. So also the word *knowledge* or *truth* is supposed to mean something fixed and eternal and to have this meaning apart from connection with and reference to inquiry. But this is a purely metaphysical preconception which has given rise to much confusion in logical theory. Every special case of knowledge is constituted as the outcome of some special inquiry. Knowledge as such must, therefore, be said to be the product of competent inquiries. Now inquiry is a *continuing* process in every field with which it is engaged. There is practically no end to the process of inquiry with regard to any subject-matter. Hence it follows that any knowledge or conclusion of an inquiry may be subjected to further inquiry and modified accordingly. No knowledge can be said to be so settled that it cannot be subject to revision in further inquiry. All that we can say is that a certain knowledge is warranted by some special inquiry, that it is a warranted assertion,

although it may be revised in the light of the results of further inquiry. Hence when knowledge is taken as a general abstract term related to inquiry in the abstract, it means "warranted assertibility".

Dewey does not call his theory 'pragmatism,' 'because the word lends itself to misconception ~~and~~ has been the centre of relatively futile controversy in philosophy. But he admits that his theory is thoroughly "pragmatic" in the proper interpretation of the word, namely, 'the function of consequences as necessary tests of the validity of propositions, *provided* these consequences are operationally instituted and are such as to resolve the specific problem evoking the operations'.¹

The pragmatist theory of truth and error has been severely criticised and rejected by many on the ground that it reduces the true to the useful and thereby obliterates the distinction between truth and error. It is a matter of common experience that what is true is not always useful and what is false may sometimes be useful for certain purposes. But if to be true is to be useful and not to be useful is to be false, then we have to treat many truths as errors and *vice versa*. According to many critics, the pragmatists are guilty of making such a confusion between truth and error. But this charge seems to be unjustified. It is not only repudiated by some leading pragmatists like James and Schiller, but does not also appear to be justified by the exposition of the pragmatist theory given by its chief representatives. The pragmatistic requirement for truth is not certainly fulfilled by the merely useful or the pleasant. James in his *Pragmatism* repeatedly tells us that truth consists in the verification of an idea by sense-experi-

¹ The account of Dewey's theory given here is based on his *Logic: The Theory of Inquiry*, vide Preface, p. iv ; Ch. I, pp. 7-9 ; Ch. VI, pp. 104-119.

ences. It is true that he speaks of truth as what *pays* or 'has the function of a *leading that is worth while*. Sometimes he even speaks of 'the true' as only the *expedient in the way of our thinking*. But all these phrases are explained by him as meaning the same thing, namely, the verification ~~of~~ truth by experiences. It is this verification ~~that~~ makes truth which, therefore, has no being or meaning apart from it. The idea that there may be truth apart from verification is thus repudiated. It is just this view of truth that seems to be advocated by Schiller, C. S. Peirce and Dewey. Schiller points out that no critic has yet been able to quote from a representative pragmatist any passage in which the logical fallacy of simple conversion of the proposition 'all truth is useful' was committed. No pragmatist, therefore, held that since the true is useful, the useful must be true. That truth is not identical with usefulness has been clearly explained by Schiller in his distinction between truth-claim and truth. Postulates, axioms, methodological assumptions and fictions are truth-claims and have their uses no doubt. Even fictions and lies make a claim to truth and are useful in their own way. But these are only truth-claims, and not truths. Truths are *verified* truth-claims. A truth-claim like a postulate is not true at all until it has received an adequate amount of verification. The necessity of verification in the making of truth is also emphasised by C. S. Peirce and Dewey. For the one, truth is the cumulative and convergent effect of scientific investigations. For the other, it is just the outcome of competent and controlled inquiry which is essentially experimental in character.

In justice to the pragmatists it should be admitted by us that they have not identified truth with usefulness. All that we seem to be justified in saying is that, on the pragmatist theory, truth consists in the verification of an idea by sense-

experiences including both cognitive and conative ones. The pragmatists are not satisfied by the agreement between our ideas and their corresponding cognitive experiences. They insist further on the agreement of the ideas with such other experiences as result from our activities in relation to the objects represented by the ideas. Thus ~~the~~ idea of water is verified when we perceive it from a distance and ~~not~~ certain satisfying experiences by touching and drinking it. It is this complex process of verification by cognitive and conative experiences that *makes* truth which, therefore, has no meaning apart from such verification. But we are to point out that verification by different kinds of experiences is a *test* of truth and that it does not make or constitute truth. An idea or belief is *known* to be true when we have an experience of the facts or objects that are meant by it. But it will *be* true if the facts or objects really exist, no matter whether they are known by us or not. That there are such facts or objects, *i.e.* realities, cannot be, and probably has not been, denied by the ~~pragmatist~~. Like the man of common sense or the realist, he also admits that "all our truths are beliefs about "Reality," and that in any particular belief the reality acts as something independent, as a thing *found*, not manufactured'.¹ If this be so, we are to say that our ideas and beliefs are true even before their corresponding independent realities are found or known by us, although we know them *as* true only when we have experiences of the realities. My prediction of a future event is *now* true, if and only if the event actually happens afterwards as predicted. The prediction is of course verified or proved to be true, when we have an experience of the event. Hence we are to say that truth consists in correspondence to fact or reality and is *tested* by experience, be it cognitive or conative or both. If, however, we say with

¹ Cf. James, *Pragmatism*, p. 243.

the pragmatist that truth is *made* or constituted by verification, we do not see how the truth of the verifying experience can be made out. A verifying experience does not usually require verification, although it is generally accepted as true. That I am now writing is an experience which may be taken to verify the truth of my perception of the paper I am writing upon. But the experience of writing is true and also known to be true apart from relation to any other verifying experience. This is so because the experience in question refers to or corresponds with an actual fact and the correspondence is directly known by me. Hence we conclude that truth consists in correspondence with fact and that, whenever necessary, it is tested or verified by experience of facts or of effects of the activities directed towards facts. In the light of these observations we may say that pragmatism gives us one among other methods of testing truth and has thus a rightful place in a comprehensive theory of truth.

4. ~~The~~ Correspondence Theory

Of the different theories of truth and error, the correspondence theory is perhaps the most popular and widely accepted. But it has been stated and accepted in a variety of forms and has received somewhat different explanations at the hands of its exponents and critics. So we shall do well to distinguish between its different forms and their respective characters.

In the old school of common-sense or naive realism, we have the theory that truth consists in a direct correspondence between knowledge and reality, and that all our normal perceptions are true in this sense. For common sense the objects of knowledge exist independently of knowledge in the external world. In every clear and distinct

perception our mind comes in direct contact with external things and knows them just as they really are. The objects of the world with all their qualities and relations are directly presented to the perceiving mind. In the case of memory and other non-perceptual forms of knowledge also there is the same direct contact of knowledge with its objects. We should not think that things are *represented* in our consciousness by the impressions or ideas which they produce in it and which intervene between the knowing mind and the thing known. On the other hand, they are directly *presented* to consciousness, and *are* what we know them to be. Such is the verdict of unsophisticated common sense with regard to the truth of our knowledge.

Although it is customary to speak of the above view as a form of the correspondence theory, it is doubtful whether it should be so described at all. The man of common sense believes that in knowledge our mind comes in direct contact with the object and not that it represents the object through a mental state which truly corresponds to the object. When we perceive a book with a red cover, what happens, according to common sense, is that a red book is simply seen, and not that it is perceived *through* the sensation of red colour. But in the absence of some distinction between a mental content and the object from which it comes, we cannot strictly speak of any correspondence between knowledge and its object. All that we can say is that knowledge corresponds to its object in the sense that it directly reveals the object.

But if, as common sense holds, every knowledge or experience reveals objects as they really are, we cannot explain such cases of wrong knowledge as illusion, dream, etc. In these cases we can hardly speak of a correspondence between knowledge and real objects in the external world. Nor can we explain how different persons perceive

different and sometimes opposed qualities in the same thing at the same time, for a thing cannot possess opposite characters at one and the same time.

The theory of naive or natural realism with the correspondence-notion of truth is revived in a modified form by neo-realism, which is one of the well known schools of modern realism. 'For all the modern schools of realism, as for the old, the objects of knowledge are independent of and external to knowledge, and possess a being or reality which in no way depends on any mind or its experiences. They also generally agree in holding that truth consists in the correspondence of knowledge to its objects and that error is due to want of correspondence between the two. Now for neo-realism this correspondence is always direct. To show that there is a direct correspondence between knowledge and its objects, some neo-realists suppose that there is a numerical or structural identity between the content of knowledge and the object known. ¶ They, or at least some of them, adopt the searchlight view of consciousness and speak of it as a cross-section of reality. Just as a searchlight by playing over a landscape and illuminating its different parts makes a separate section of them from other parts, not so illuminated, so consciousness is the cross-section or collection of objects illuminated by it (i.e. by the specific response of the nervous system). The contents of knowledge are thus numerically identical with the things known, i.e. the things themselves become contents of knowledge. Thus when I know a tree, we are to say that it is the same object which figures in the external world that is now present in my consciousness. Other neo-realists, however, would say that when I know a tree it is not the case that the tree bodily enters into my consciousness, but that between the tree and my consciousness of it there is a structural identity. This means that my perceptions or

images or ideas of the different parts of the tree stand in the same spatio-temporal relations in which the parts of the tree actually stand in the physical world. Hence the order and arrangement of parts of the physical object are repeated in my knowledge of it. 'The truth of knowledge consists in its correspondence to the object in this sense of an 'one-one relation' or structural identity between them. \

\The neo-realist theory of correspondence, as explained above, seems to be an improvement on the old theory and to obviate its difficulties. But when we examine it closely we find that it does not take us much farther than the old correspondence theory of truth. \If, when we know some objects, our knowledge or consciousness is constituted by those objects, we do not see in what sense we can speak of a correspondence between the two. There is, really speaking, no subjective content of the mind that might correspond to the object. The other explanation of correspondence, given by other neo-realists, as a sort of 'one-one relation' or structural identity between consciousness and its objects seems to be equally unacceptable. If structural identity means an 'one-one relation' between knowledge and its object, then we are to say that when we know a book-on-the-table the percept or image of the book must stand on that of the table. But even if this is true in the case of visual and tactual images, it hardly holds good in the case of other kinds of images, and far less of ideas and percepts. To perceive or to think of a book as being on the table is not to have two percepts or thoughts as being one upon the other. Rather, it is to have one percept or thought which takes cognisance of the fact that two objects are related in a certain way, or which cognises the one as being upon the other. Hence the idea of structural identity fails in all cases of knowledge excepting visual and tactual images. \ Finally,

the neo-realists seem to labour under the same difficulties as the older ones when they try to solve the problem of error. If all the facts which we perceive or somehow know are objective, and none mental or subjective, we do not understand how there can be error or illusion. If wrong or illusory experience be as much objectively conditioned as true knowledge, there can be no distinction between truth and error. Of course, the neo-realists say that while the objects of true knowledge exist in physical space and time and are, therefore, real, those of wrong knowledge do not exist but *subsist* in the world of being. But of such subsistent entities we can hardly form any definite idea. Further, illusory objects are experienced by us, not as having the shadowy character of mere subsistence but as actual existents in the physical world. And if things are what we experience them to be, we are to say that there are real objects corresponding to illusory experience which, therefore, ceases to be illusory. Hence the neo-realist account of the correspondence theory is found to be unsatisfactory.

The difficulties in which the theory of naive realism is involved led some philosophers like Locke to give up the theory of presentationism in knowledge and formulate that of representationism. According to the latter, the mind can directly perceive only its own states or ideas. The things of the external world cannot be directly known by it. But these things act on our mind and produce certain ideas in it. We know external things through the ideas which they produce in the mind and the forms which they impress on it. With this we have another form of the correspondence theory which is known as the 'copy theory of ideas'. Knowledge is true in so far as it corresponds to its objects and this means that the ideas constituting it are exact copies of those objects. Thus the corres-

pondence between knowledge and its objects, in which truth consists, is a sort of resemblance between ideas and objects, like the one we find between a photograph and its original.

But this form also of the correspondence theory is no more acceptable than the previous one. It proceeds on the assumption that mental states belong to the same order of existence with physical things and that the former can copy or resemble the latter. But it is not true to say that when we perceive a round table, about three feet high, our perceptive consciousness also has a round shape and is about three feet in height or even that it has any spatial characters like roundness and height. Consciousness has no extension and can, therefore, be neither round nor high. Further, even if we suppose that in true knowledge our ideas resemble external objects we do not see how the resemblance can be known. The objects are external to the mind and its ideas, and so cannot be directly known by us. Hence we cannot compare them with our ideas and say whether our ideas resemble them or not.

The 'copy theory of ideas' as a form of the correspondence theory of truth seems to be revived in a modified form in modern critical realism. According to it, there are three distinct factors in any knowledge, namely, mental states, data and object. The data of knowledge are the character-complexes through which the object is presented to the mind. They are forms or essences which are immediately present to our consciousness when we know anything. The object is presented to the mind, not immediately, but through the medium of these character-complexes. Thus when I perceive a round table about three feet high, what is immediately present to my consciousness is the datum, 'a round-table-about-three-feet-high'. This datum is distinct from both the mental state to which it is presented and the physical object (table) which

is presented through it. While the mental state and the object exist, the datum does not exist; it is a non-physical essence or a logical entity. So far as their ontological status is concerned, the data through which we know objects are not, as the neo-realists suppose them to be, parts or characters of the objects, nor can all of them be said to belong to objects. While primary qualities are in things, secondary qualities like colour, taste and smell do not exist in things themselves. Hence in the case of some data only (i.e. those presenting primary qualities) we may say that they are in a sense the characters of things or objects. Knowledge is true in so far as it corresponds to its objects in the sense that the character-complexes through which the objects are known are or are identical with, the real characters of those objects. It is false or erroneous when the character-complexes affirmed of the objects are not their real characters. Although we know objects through these data, still we should say that we know them directly, just as we say that we see or touch a book directly when it is seen or touched through our eyes or hands.

It should, however, be observed here that the critical realist's idea of correspondence suffers from the same defects as the old 'copy theory of ideas'. According to them, our knowledge is true when the character-complexes, through which we know an object and by which we characterise it, are the real characters of that object. But if these character-complexes are not physical but purely logical entities, and if they have no existence like physical things and mental states, we do not see how they can ever *become* the characters of physical objects, or be even identical with the real characters of physical things. A non-physical entity like the critical realist's 'character-complex' cannot be the character of a physical thing, which also must be physical. To say that it can be so or, as

the critical realist says, that it is so, is to say that the non-physical can be or is the physical. But this is obviously a self-contradictory statement. Of course, when explaining the distinction of a datum from a mental state, the critical realist tells us that we may have a perceptual datum like "a round-table-about-three-feet-high", but we cannot have a mental state which is round and high. But if a datum be not a physical entity and has no spatio-temporal relations, it is meaningless to speak of it as being round or high. A mental state cannot be round and high because it is not physical. Just for the same reason, a perceptual datum also can be neither round nor high. Hence there can be no existential identity between the data and the objects of knowledge. This point is emphasised by the critical realist when he criticises the neo-realist view that the physical objects themselves get within consciousness when we perceive them. In the case of secondary qualities, he frankly admits that the data are not the characters of physical objects. But he forgets all this when he says that in veridical perception the character-complexes *are* the characters of physical objects. Since, however, there can be no existential identity between them, all that we can reasonably say is that in true perception the character-complexes faithfully *represent* the real characters of the object of perception. But with this we are led back to the 'copy theory of ideas', the only difference being that instead of saying that ideas resemble or copy objects, we have to say that ideas (or mental states) represent (i.e. resemble) objects through the character-complexes which resemble or copy them. It should be noted also that the resemblance cannot be proved in either case, since on either view we have no direct access to the object. If this be true, we have to reject the critical realist's contention that objects are directly known, even though we have to know them through the

medium of character-complexes. Just as I see a thing directly when I see it *with* my eyes so, the critical realist contends, I perceive a thing directly when I perceive it *through* some data or character-complexes which are the means of perceiving objects. But the critical realist here fails to note an important distinction between the two cases. Those who say that they see or touch a thing directly, take the visual or tactual datum as a sensible physical quality of the thing itself. For the critical realist, the visual datum is not a real character of the object nor does it belong to the object in any way, it being but the datum for a secondary perceptual quality. The tactual datum also is, for the critical realist, a non-physical entity and so cannot be the physical quality of a physical object. There is, therefore, no direct knowledge of objects through the medium of sense-data or character-complexes. Hence we conclude that the critical realist theory of correspondence is not, although it claims to be, really more satisfactory than the old 'copy theory of ideas'.

In contemporary European philosophy we find another type of the correspondence theory of truth. According to it, the truth of knowledge consists in its correspondence, not to an external reality in any of the senses explained above, but to some occurrence or event. There are, however, two forms of this theory, which, although very much alike, should be distinguished. For the one, the truth of knowledge means its correspondence to some experience; while for the other it consists in its correspondence to some fact which may or may not be experienced. The first may be called the "epistemological", and the second the "logical" theory of correspondence.

The "epistemological" theory seems to be strongly advocated by W. T. Stace¹ whose views may be taken as

¹ Cf. *The Theory of Knowledge and Existence*, Ch. XV.

typical and stated as follows. Truth and error are characters of judgments, and all judgments either affirm or deny something about particular existents. A judgment is true when it agrees with given facts or experiences, and false when it fails to do so. The simplest kind of perceptual judgment such as, 'this is red' is true if it agrees with the presentation of a red patch of colour. It would be false if the presentation were in fact green. This means that the truth of the judgment consists in its correspondence to the presentation or experience of red, or in the correspondence between the percept and the concept of red. The same formula of the correspondence of concepts with percepts holds good in the case of all other judgments, however complex or abstract they may be. The judgment 'this is an apple' is true if it leads to the experiences of a certain sweet taste, soft touch, etc. Similarly, a general proposition like 'all men are mortal' will be true if it agrees with all actual past, present, and future experiences in regard to human bodies as becoming in the end cold and motionless. But there are certain propositions which are highly abstract and involve an element of construction in them. They relate to objects which are not matters of actual sense-experience for us but are constructed by our thought on the basis of certain experienced facts and as an explanation for certain others. Such are the propositions about the existence of an external world of 'things', of other beings, and the scientific hypotheses about ether, electrons, sound-waves, etc. Such also is the belief in the existence of an unperceived table. The principle of correspondence to the given or to actual experience applies as much to such constructions as to the previous cases, although in a different sense. In the case of constructions it cannot mean 'that there is an actual correspondence of the judgment with the given. For the very essence of a construction is that it is not a fact and that

no given corresponds to it. Constructions, however, are tied to the given in the sense that 'the deductions from them agree with experienced facts and that if any deductions from them *disagree* with the given, the constructions must be false'.

The "epistemological" theory of correspondence as explained by Stace, seems to be unsatisfactory for several reasons. In the case of the simplest and most elementary perceptual judgment like 'this is red', he supposes that there is the application of the concept of 'red' to the presentation of red colour, and if the two agree the judgment will be true. If, however, the presentation be green, then the judgment will be false. But if, as he himself says, the 'this' is not a thing or an object in the external world, but "a mere colour patch", 'a presentation', the judgment will be equivalent to 'red is red', and the word 'this' has no value other than that of a linguistic mode of expression. It may as well be expressed by the phrase 'a sensation of red', or simply by the word 'red'; or it may not be so expressed at all. And if this be true, we do not see how we can speak of a correspondence in this case, or hold that there can be an error of judgment if we call it green. One who calls it 'green' makes only a wrong use of words, while one has and continues to have just a sensation of red. Further, if the truth of a judgment consists in its correspondence, not to an independent object, but to a mere presentation, then even an illusion will have to be regarded as true knowledge, since there is in it an actual *presentation* of the illusory object. In the case of a general proposition like 'all men are mortal', we cannot expect to verify its truth in actual experience because the verifying experiences are unlimited in number and can never be exhausted. As for constructions, Stace himself admits that there is no actual correspondence of the judgments with the given,

although there may be disagreement of the deductions from them with the given. But this means that constructions cannot be proved or verified by experience, and that they can only be disproved by it. Of course, Stace suggests that a construction is validated when the deductions from it agree with facts. But this involves the fallacy of affirming the consequent, since the same deductions may follow from a different construction. Thus some constructions like atoms and ether, which were once believed to explain known facts and to be valid, have now been discarded. Further, it makes no difference to our actual experience whether a construction like matter or the unperceived table is valid or not. Our experiences would be the same no matter whether matter or the unperceived table really exists or not. If it be said that a construction would be finally validated if it explains all experiences and is not contradicted by any, then we will have to wait till the end of time to ascertain whether it is valid or not, because all experiences cannot have in any length of time. So we see that the "epistemological" theory which holds that in all cases truth consists in correspondence to experience cannot be accepted as valid.

The logical theory of correspondence is advocated by Bertrand Russell.¹ According to him, truth is to be defined by correspondence to fact, and not to experience. A proposition is true when it corresponds with some real occurrence or fact. If we know the fact to which truth corresponds, i.e. if the proposition is suitably related to some experience, then we are said to *know* the proposition *as true*. But a proposition may be true without our knowing it as true. The proposition "it is raining" is true if it is actually raining. It may be that I am sleeping at the time and do not realize that it is raining. But that would not make

¹ Cf. *An Inquiry into Meaning and Truth*, Ch. XXI.

the proposition "it is raining" any less true. If I wake up and look out of the window of my room I would know that the proposition "it is raining" is true. It follows that truth as a character of propositions depends on their correspondence to some real facts and that the knowledge of truth depends on its verification by experience. Since however, ~~a true~~ proposition may be but need not be known as true, there is no reason to suppose that all true propositions are verified or verifiable. Among true propositions only a few are directly verifiable, namely, those which assert what I now perceive or remember. Thus perceptual propositions like 'I am hot', and memory-propositions like 'I had fever last night', may be said to be directly verified in the sense that I have direct experiences of the corresponding facts, through perception in the one case and through memory in the other. General propositions like 'all men are mortal' are true in so far as they correspond to facts, but these cannot be verified by experience because we can have no experience of the unlimited number of instances covered by any proposition containing the word "all". As for constructions like the hypothesis of sound-waves, it might be said that these are indirectly verifiable in so far as they enable us to predict occurrences which *are* verifiable in experience. But here we should remember that a construction might be false and yet not lead to any consequence which experience would show to be false. Similar is the case with the construction of an unperceived table. The unperceived table cannot be verified by experience and may not exist. Yet the hypothesis of the unperceived table leads to no consequence which, so far as we know, is contradicted by experience. Hence we conclude that the truth of a proposition does not depend on its verification by experience, but on its correspondence to fact.

The logical form of the correspondence theory of truth

seems to be more satisfactory than any other we have discussed before. The same theory is to be found in the logical realism of the Nyāya in Indian philosophy.¹ The Nyāya believes in an independent world of objects which stand in certain relations to one another and should, therefore, be regarded as independent facts. According to it, the truth of knowledge consists in its correspondence with objective facts, while coherence and practical utility are the tests of truth in such cases in which we require a test. It defines the truth of all knowledge as a correspondence of relations (*tadvati tatprakāra*). To know a thing is to judge it as having such-and-such a character. This knowledge of the thing will be true if the thing has really such-and-such a character; if not, it will be false. The Nyāya view of correspondence is thus different from the new realistic idea of structural correspondence or identity of contents. That knowledge corresponds to some object does not, for the Naiyāyika, mean that the contents of the object bodily enter into consciousness and become its contents. When, for example, I know a table, the table as a physical existent does not figure in my consciousness. This means only that I judge something as having the character of 'tableness' which really belongs to it. There is a subjective cognition of a physical object. The one corresponds to the other, because it determines the object as it is, and does not itself become what it is. If it so became the object itself, there would be nothing left on the subjective side that might correspond to the physical object. Nor, again, does the Nyāya follow the critical realist's idea of correspondence between knowledge and its object *through* certain character-complexes which are referred to the object by the knowing

¹ For a fuller account of the Nyāya theory of truth and error see the author's *The Nyāya Theory of Knowledge*.

mind and also belong to the object as its real characters. When we know anything we do not first apprehend a certain logical essence or a character-complex and then refer it to the thing known. Our knowledge is in direct contact with the object. In knowing the object we judge it as having a relation to certain characters or attributes. Our knowledge will be true if there is correspondence between the relation asserted in knowledge, and that existing among facts. Thus my knowledge of a conch-shell as white is true because there is a real relation between the two corresponding to the relation affirmed by me. On the other hand, the perception of silver in a shell is false because it asserts a relation between the two which does not correspond to a real relation between them.

While truth consists in correspondence, the criterion of truth is, for the Nyāya, coherence in a broad sense (*saṁvāda*). But coherence does not here mean anything of the kind that objective idealism means by it. The Nyāya coherence is a practical test and means the harmony between cognitive and conative experiences (*pravṛttisāmarthyā*), or between different kinds of knowledge (*tajjātīyatva*). That there is truth in the sense of correspondence cannot, as a general rule, be known directly by intuition. We know it indirectly from the fact that the knowledge in question coheres with other experiences of the same object as also with the general system of our knowledge. Thus the perception of water is known to be valid when different ways of reaction or experiment give us the same experience of water. The Nyāya view seems to be at one with the logical theory of Russell in holding that truth consists in correspondence to fact and is indirectly verified by experience. It is in this logical form that the correspondence theory of truth may be accepted as forming part of a comprehensive theory of truth which we shall now explain.

The different theories of truth discussed above may be shown to supplement one another and be reconciled as complementary aspects of a comprehensive theory. The first requisite of such a theory is the independent existence of a world of objects. If there were no such world, there would be no ground for the distinction between truth and falsehood. Some of our beliefs are true or false according as they are or are not borne out by independent objects or facts. It is because there are certain independent objects, to which our beliefs may or may not conform, that we distinguish between truth and error. Hence we say that truth consists in the correspondence of our knowledge with independent objects or facts. The difficulty on this view, it is generally remarked, is that if the objects are independent of knowledge, we cannot know whether our knowledge corresponds with them or not. How can we know that which is outside and beyond knowledge, and see that true knowledge agrees with it? The reply to this is that in the case of external objects, physical things and other minds, we cannot straightway know the correspondence between our knowledge and its objects. Still, we cannot deny the reality of these external objects. But for the independent existence of other things and minds we cannot explain the order and uniformity of our experiences and the similarity of the experiences that different individuals may have under similar circumstances. That some of our experiences represent the real qualities of things may then be known from the fact that they are given in the same way to different persons, or to the same persons through different senses. On the other hand, some of our experiences are not taken to represent the qualities of things, because they do not cohere with other experiences of the same individual or of different individuals. The first kind of experience is considered to be true and objective, while

the second is judged to be false and subjective. Similarly, our knowledge of other minds is true when it correctly represents the contents of those minds. It will be false, if what we impute to them forms no part of their actual contents. This shows that it is correspondence to facts that constitutes the nature of truth, although we cannot directly know such correspondence in the case of physical things and other minds. To know this we have to consider if one knowledge coheres with others or the whole body of human knowledge, and also consider if we can successfully act on our knowledge. What is true works, although whatever works is not true. Thus we know the correspondence of knowledge with facts from its coherence and pragmatic value. But to know that a certain knowledge corresponds with facts is to *know* its truth. It does not constitute the truth. 'The knowledge becomes true if, and only if, it corresponds with facts.' We know or test its truth when we find that it is coherent with other parts of our knowledge and our practical activities. So truth is constituted by correspondence with facts and is tested by coherence and practical activity.

It may be urged against the above view that truth consists in correspondence and is tested by coherence, that it either assumes the truth of the testing knowledge, or must go on testing knowledge *ad infinitum*. If knowledge is true when it corresponds with facts, and if the correspondence cannot be directly known, then the truth of every knowledge must be tested by its coherence with others. This, however, means that there can be no end of the process of proving knowledge and, therefore, no final proof of any knowledge. To solve this difficulty we must admit that there is at least one case in which knowledge is, by itself, known to be true. We have such a case in self-consciousness. While the truth of all other knowledge is to be tested

by coherence, the truth of self-consciousness is self-evident and requires no extraneous test. The self is a self-manifesting reality. Hence the contents of our mind or the self are manifested by themselves. They are at once existent facts and contents of consciousness. To become conscious of the contents of one's mind is just to make them explicit. What we are here conscious of are not outside or ~~known~~ consciousness. Mental contents not only *are*, but are conscious of themselves. The state of knowledge and the object of knowledge being identical, we cannot strictly speak of a correspondence of the one with the other. Or, if we speak of a correspondence between them we are to say that it is directly known and so need not be known or tested in any other way. When we feel pain, or know something, or resolve to do anything, we may be conscious of feeling it, or knowing it, or resolving to do it. What we are here conscious of as objects are the objects of themselves as they become explicit or conscious of themselves. Similarly, necessary truths and *a priori* principles like the laws of thought, logical and mathematical truths seem to have self-evident validity. The reason for this is that these truths are or express the forms and contents of our own consciousness. They are inherent in or arise out of the nature of our own thought and consciousness, and in knowing them consciousness knows itself, i.e. its own forms. They are at once modes and objects of consciousness. In any judgment or knowledge of them, the content and object of consciousness are the same and directly known to be the same. Such knowledge is, therefore, not only true, but also known to be true by itself. Hence we admit that the truth of self-consciousness is self-evident, while all other truths are evidenced by external tests like coherence and pragmatic utility or verification.

CHAPTER IX

THE THEORY OF EXTERNAL RELATIONS

The word 'relation' is one of those philosophical terms, of which the meaning is at once best known and least known. We all know that the objects of the world stand in various sorts of relations to one another and to ourselves. When speaking or thinking about these objects we constantly relate them in different ways and also understand what is meant when they are said to be so related. Yet when we are asked to define or describe what a relation really is, we find it difficult to say anything definitely. What this or that particular relation is we can describe more easily than we can explain what relation as such is. "Relation", says Stace, "appears to be an indefinable ultimate. It is true that certain particular kinds of relation may be defined in terms of simpler relations. But relation as such cannot be defined".¹

Relations are neither things or substances nor qualities of things. Like things or qualities, relations do not *exist* in space and are not perceived by our senses. "Suppose", suggests Bertrand Russell, "that I am in my room. I exist, and my room exists; but does 'in' exist? Yet obviously the word 'in' has a meaning; it denotes a relation which holds between me and my room. This relation is something, although we cannot say that it exists *in the same sense* in which I and my room exist".² Thus a relation supposes at least two things between which it is or holds. We cannot speak of a relation with reference to any one single thing or part or aspect of a thing. A relation cannot

¹ W. T. Stace, *The Theory of Knowledge and Existence*, p. 334.

² Bertrand Russell, *The Problems of Philosophy*, pp. 139-140.

be unless there are at least two things or objects between which it holds. As J. S. Mill says, the *qualities* of a body are the attributes grounded on the sensations which the presence of that particular body to our organs excites in our mind. But when we ascribe to any object the kind of attribute called a Relation, the foundation of the attribute must be something in which other objects are concerned besides itself and the precipient".¹ Without committing ourselves to the view that a relation is the attribute of an object in the usual sense, we may say with Mill that in every relation more than one object is concerned. A relation involves a complex situation into which one object enters jointly with one or more other objects, and it is the expression of our consciousness of this situation or, more specifically, of the way in which the objects enter into it. For two objects to *be* related means to be somehow *together* in one situation; and to know *how* they are related we require to know how they are, or come together in it. As Professor Alexander observes, "When a relation relates certain terms it makes a connected whole of those terms. The relation may be described as the whole situation into which its terms enter in virtue of that relation".² A relation may thus be described provisionally as the togetherness of two or more objects in one situation or one whole. The relation between a father and his son expresses the way in which two persons come together in one family. The relation of difference between red and green means how the two stand together in the colour scale. If a book be on a table, the relation of the one *being on* the other is expressive of the way in which the two are or exist together in space. It would thus appear that all relations belong within some whole or system. But for the ordering of objects in some

¹ Cf. *A System of Logic*, Book I, Chap. III, p. 42.

² Alexander, *Space, Time and Deity*, V. I, p. 240.

system or other we should have no relations among them. In the absence of any social system like the family the relation of one person 'being the father of' another would not be what it now is. If two colours could not be compared as members of the colour pyramid or system, they would not be recognised as either similar or different, and ~~there~~ there would be no relation between them. We can hardly compare a colour with a sound, because the two belong to different systems. In view of this we may say that a relation is a form of order and arrangement which holds between two or more objects when they are held together in one system. A relation may thus be further described as a form of order among things which belong to one system. It holds between two or more things and brings them together as parts or members of one whole or system. With this general idea about the nature of relation in mind we proceed to consider the principal types of relations which appear in our experience. This will help us to discover what ~~is~~ common to the different kinds of relations and thereby determine more precisely the nature of relation as such.

There are innumerable relations among the objects of our experience. But these do not appear singly as so many unique instances of relation, none of which is like any other. On the other hand, relations fall into groups and arrange themselves into certain general classes. They seem to come under and exemplify certain general types. Among the general classes or types of relations which we find in experience the more important ones may be considered here.

Spatial relations form one important, general class of relations which hold between two or more physical objects. All physical objects including our own bodies occupy definite positions in space and they fill certain portions of space as

well. In respect of the positions which they occupy in space, physical objects are related as one being to this or that side of the other, or as being above or below one another, or as being near or farther from one another. In respect of the portions of space which they fill, they are related as being within one another like parts and wholes and as being larger or smaller than one another. So also they may move from one place to another and change their respective positions in space. Such movements change their spatial relations to one another; what was near to some object would be farther from it and what was farther would become nearer to it. All these relations among physical objects which are grounded on the fact of their being in space form the general class of spatial relations. The spatial relations taken in general are in a sense constitutive of the physical objects. A physical object cannot exist unless it has some position in and occupies some part of space. Nor can its existence be conceived by us apart from its spatial relations. We must think of a physical object as being somewhere and as having some size and shape. The order of space and the spatial relations appearing therefrom thus seem to be universal and necessary for the world of physical things or objects.

Temporal relations, like spatial ones, are common to all physical objects and events. Just as a physical object must exist in space, so it must be in some time. In respect of the period of time in which objects may exist, they are said to be past or present or future. When compared in respect of their position or order in time, they are related as *before*, *after* and *contemporaneous with* one another. So also the changes in the conditions or states and qualities of objects are related as being earlier or later, successive or simultaneous with one another. With reference to their order and duration in time objects and events are related as older

and newer and as more or less durable than one another. All these relations among objects and events which arise out of their ordering in time form a class different from that of spatial relations. There is one peculiarity of the temporal order of objects and events which distinguishes it from their spatial order. The order of space can be reversed, but not the order of time. We may pass from one point of space to another and come back from the second to the first. But we cannot go from the present to the future and then reverse the movement, and come back to the present. The course of time from past to present and from that to the future is irreversible. What is once past is for ever past and there is no chance of its being made present or future. In other respects, however, time and space are very similar in nature and closely bound together. We cannot think of the one apart from the other. A spatial object must be in some time and a temporal event must be somewhere in space. An event which occurred *nowhere* is as unreal as a spatial object which existed *no time*. Time and space thus seem to be the universal conditions for the existence of all objects and also of our experience of them.

Quantitative relations form another class of relations among physical objects. These relations are based primarily on the numerical characters of objects. Taking objects each as one we may discover such numerical relations among them as *equal to*, *a quarter*, or *half of*, *double*, *triple* or *multiple of* one another. Thus in respect of their quantity any one object is equal to one other object, one thing *plus* one other thing is equal to two things, two is half of four, four is double of two and so forth. The relations of being numerically equal to, half of, double of etc. form the group of quantitative relations which arise from the ordering of objects in respect of their numerical characters and constituents.

Qualitative relations are distinguished from other kinds of relations and grouped into a separate class. Just as things are related in certain ways in respect of their quantity, so they seem to be related in certain other ways with regard to their qualities. Generally speaking, physical things possess five kinds of qualities, namely, sound, touch, colour, taste and smell. Each of these forms a class within which many varieties are included. Thus there are many varieties of sound, touch, colour, etc. One kind of quality is different from a quality of another kind, and all the instances of the same kind more or less resemble one another. Hence the objects possessing these different kinds of qualities appear to be related as being similar or dissimilar to one another. Two musical instruments resemble each other more than either of them resembles a coloured picture. Among the qualities themselves we may discover the relations of resemblance and difference in various degrees. Two shades of green have more resemblance to each other than either has to a shade of red. Within the same kind of quality, say sound or colour, there are other qualitative relations. Thus one sound may be louder than another sound and one colour brighter than another. These differences in qualities of the same kind correspond to differences in the objects possessing those qualities. Thus we say that one thing is brighter than another, one fruit is sweeter than another, and so on. These relations of 'resemblance to', 'difference from', 'brighter or louder than' etc. form the class of qualitative relations which we find among the objects of experience.

Causal relations, like spatial and temporal ones, seem to be present among all objects of experience. With regard to any particular object of the world, it may be said that it is related to other objects as both a cause and an effect. On the one hand, it arises out of certain conditions and is

related to them as their effect. We cannot think of any particular physical object which has not the cause-effect relation to other objects. Everything of the physical world must have a cause and everything must be the cause of certain effects. Further, the totality of all objects of the world is now regarded by us as one endless chain of causes and effects. Any activity or change in anything of the world has its effects on all other things. Thus the world is regarded as one system of many inter-related objects. The whole world is also regarded as created or evolved by some ultimate cause which, though not caused, is related to the world as cause to effect. Like spatial and temporal relations, the relation of cause and effect seems to be constitutive of things or objects of experience. Whatever exists must be in some time and place, and be related to other things by way of cause and effect.

Logical relations form a general class which is different from those we have explained before. These are concerned with the various relations among terms and propositions with which Logic mainly deals. In a proposition two or more terms are related in a certain way. The different ways in which the terms may be related are classified under certain types of logical relations. Thus we have such a relation as the subject-predicate or the substantive-adjective between certain terms. If in a proposition some term representing a quality or an attribute is asserted with regard to another term which represents some individual object or objects, we have the subject-predicate or substantive-adjective relation between two terms, e.g. 'Socrates was wise', 'men are rational'. When the terms represent individuals and classes, we may have the logical relations of class-membership and class-inclusion or class-exclusion among them. Thus 'Socrates was a Greek', means that Socrates was a member of the class of Greeks; 'men are

animals' signifies that the one class is included in the other, while 'men are not gods' shows that the one is excluded from the other. When the terms represent substances and their qualities or activities, parts and wholes, individuals and universals, we have the logical relation of inherence between them. Thus we say that a quality or activity inheres in some substance, the cloth as a whole inheres in the threads, and the universal 'whiteness' inheres in all white objects. When, again, the terms stand for a mind which knows and anything which is known, we have the relation of subject-object or knowledge between them. The mind or self is the subject to which other things are related as objects.

In respect of the number of terms involved in them, logical relations are classified into dyadic or dual, triadic, tetradic, pentadic, and polyadic or multiple relations. Relations which have only two terms are called dyadic or dual relations, e.g. 'A loves B', 'Brutus killed Caesar'. Triadic relations require three terms, e.g. 'A is jealous of B on account of C', 'the man gave a rupee to the beggar'. Similarly, four-termed relations are called tetradic, e.g. 'he owes me five rupees for a watch'; and five-termed relations are called pentadic, e.g. 'the house is separated from the railway station by a bridge, a meadow and a garden'. Relations involving more than five terms are called polyadic or multiple relations. Sometimes, all relations involving more than two terms are called multiple relations. It should be noted that in each of these cases, the relation cannot hold between fewer than the given number of terms. Thus the relation of *owing* requires a debtor, a creditor, the debt and that on account of which the debt is incurred; the relation of *being jealous* requires a person who is jealous, another person of whom he is jealous and that for which he is jealous; and so on.

Dyadic relations have been further classified according to the number of terms to which a given term may stand in a certain relation. Thus we have such relations as (1) one-many, e.g. 'A is the father of B' (there being the possibility of many terms other than B to which A may stand in the same relation); (2) many-one, e.g. 'we are subjects of the king' in which many are related to one as his subjects; (3) one-one, e.g. 'A is twin of B', there being no other term to which A stands in the same relation; (4) many-many, e.g. 'A loves B', since there may be other terms than A which stand in the same relation to B, and there may be other terms than B to which A stands in the same relation.

Relations are also classified, according to their logical properties, into symmetrical, asymmetrical and non-symmetrical, and into transitive, intransitive and non-transitive.

A symmetrical relation is such that if it holds between A and B, then it holds between B and A, e.g. *equal to*, *like*, *unlike*, etc. If A is like B, then B is like A; if A is equal to B, then B is equal to A.

An asymmetrical relation is such that if it holds between A and B, then it cannot hold between B and A, e.g. *father of*, *greater than*, *heavier than*, etc. If A is the father of B, B cannot be the father of A, and so on.

A relation is non-symmetrical when it is such that if it holds between A and B, it may or may not hold between B and A, e.g. *loves*, *brother of*, etc. If A loves B, B may or may not love A. If A is the brother of B, B may or may not be the brother of A.

A relation is transitive when it is such that if it holds between X and Y, and between Y and Z, then it holds between X and Z, e.g. *equal to*, *greater than*, etc. If X is equal to Y and Y is equal to Z, then X is equal to Z. If

A is greater than B and B is greater than C, then A is greater than C.

A relation is intransitive when it is such that if it holds between X and Y, and between Y and Z, then it never holds between X and Z, e.g. *father of*, *next to*, etc. If A is the father of B, and B is the father of C, then A cannot be the father of C.

A relation is non-transitive when it is such that if it holds between X and Y, and between Y and Z, then sometimes it holds between X and Z, and sometimes it does not. For example, *friend of*, *loves*, *hates*, etc. If A is the friend of B, and B is the friend of C, then A may or may not be the friend of C.

There are other logical relations than those we have explained above. These are concerned with the relations among propositions and are commonly known as the relations of equivalence, contradiction, subalternation, implication, alternation, etc. These logical relations among propositions are distinguished from others by the fact that from the truth or falsity of one proposition we may know something about the truth or falsity of the others. Of two contradictory propositions, the truth of the one implies the falsity of the other and the falsity of the one implies the truth of the other. Logical relations have thus great value for inference. But it may be asked here: Do logical relations or relations in general possess any value and importance for the terms or objects related by them? To this question we shall now turn our attention.

The question whether and how relations affect the terms related by them is one of the burning questions in modern philosophy. It has been the centre of much controversy among idealists who advocate the theory of monism and realists who are generally in favour of the theory of pluralism in philosophy. In the course of this controversy

two general theories have been developed with regard to the nature of relations, namely, (1) that relations are *external* to the things they relate, and (2) that they are *internal*. In this chapter we shall briefly explain the first theory and consider the arguments for and against it.

The theory of external relations is generally accepted by the realistic thinkers. By saying that relations are external we may mean either that they are independent of the special qualities of their terms or that they make no difference to the terms they relate. These are really two different ways of expressing the same fact, namely, that relations fall outside the being and the nature of the terms related by them. Two things may be related in a certain way, but that does not mean that they must always be so related or that they would not exist if they are not so related or even that they would be different things apart from that relation. When a man enters into a certain room, he becomes related to it by the relation of *being in* it. But neither the man nor the room is altered in any way by this relationship. When he leaves the room, the relation between the two ceases. Each term of the relation, however, continues to exist just the same that it was, before it entered into that particular relation. The relation is thus external to the things related by it in so far as it does not affect their existence or nature in any way. To say that relations are external, therefore, means (1) that the terms related have an independent existence and nature of their own apart from any relation, (2) that they may but need not enter into the relations which we find among them, (3) that their relations do not alter their essential nature in any way, and (4) that they remain essentially the same things when they enter into and pass out of a certain relation. "According to the theory of the externality of relations", says Professor Perry, "terms acquire from their new rela-

tions an added character, which does not either condition, or necessarily alter, the character, which they already possess".¹ Professor Spaulding explains more fully the idea of the externality of relations when he says that he means by it '(1) that, if two terms are related, neither term influences the other, (2) that the absence of either term would be *without effect* on the other, (3) that either term may come into being and into relation with the other term without affecting it, (4) that, accordingly, no term is *complex* by virtue of being related, and (5) that no third term underlying the related terms is necessary. Briefly, the theory of external relations is that *relatedness and independence are quite compatible*'.² Thus relations are external in the sense that their addition or withdrawal would make no difference to the terms of the relation. Bertrand Russell, who advocates the theory of external relations, means by it that "there are such facts that one object has a certain relation to another ; they do not imply that the two objects have any *intrinsic* property distinguishing them from two objects which do not have the relation in question".³ So an external relation is that which is not in any way grounded in the natures of the related terms. It does not mean anything to the independent existence of the terms whether they are so related or not. There is nothing in the nature of the terms to make them related in the particular way in which we find them to be related as a matter of fact.

Now the question is: Are all relations external in the sense explained above? To this question different answers seem to be given by those who believe in external relations. Some thinkers like Bertrand Russell and Professor

¹ Perry, *Present Philosophical Tendencies*, p. 319.

² Spaulding, *The New Rationalism*, p. 177.

³ Russell, *Philosophical Essays*, p. 161.

Spaulding seem to be in favour of treating all relations as external. Others, however, take up a qualified position and hold that while the majority of relations are external, there are some which are not quite so. Thus some American neo-realists who defend the theory of external relations, point out that there are certain special relations which imply the dependence of one or both of the related terms on those relations. Such are the relations of 'contains', 'implies', 'is exclusively caused or implied by'. A whole which contains certain parts is dependent on its relation to those parts. But for its relation to the parts it would not be a whole at all. We may also say, although the neo-realists would not say so, that the parts depend on their relation to the whole and would not be parts if they are not so related. Similarly, for one term or proposition to imply another is to be dependent on the other. Humanity implies rationality and, as such, depends on its relation to the latter. Again, if one thing be exclusively caused or implied by another thing, it will be dependent on its relation to that other thing. Thus smoke is exclusively caused or implied by fire, and therefore, it depends on its relation to fire.

G. E. Moore,¹ who also supports the theory of external relations as against the idealists, admits that some relations are internal in the sense that they *modify* the terms between which they hold in the proper sense of the word. 'If the being held in the flame causes the sealing-wax to melt, we can truly say that the sealing-wax would not have been in a melted state if it had not been in the flame. A relation would be internal to the terms, if it modifies them in this sense, so that they would be different from what they are apart from that relation. 'The quality "orange" is intermediate in shade between the qualities, yellow and red. This is a relational property and it is an internal one, since

¹ Vide Moore, *Philosophical Studies*, pp. 283-286.

it is quite clear that any quality which were *not* intermediate between yellow and red, would necessarily be *other* than orange.'

With regard to the relation between subject and object, which constitutes knowledge, all realistic thinkers are agreed that it is external. According to them, objects may enter into the knowledge relation, but that makes no difference their nature and existence. To be or to exist does not mean, for an object, to be necessarily related to a subject or to be known. Things may be known, but they do not depend on knowledge for their existence, nor are their nature and character anyway altered by being known. They may enter into and pass out of the knowledge relation, but that makes no difference to them. Things exist and will continue to exist just as they are, even when they are not related to any mind or subject. As Professor Spaulding puts the matter, "knowing makes no difference to, and neither constitutes nor alters, that which is known".¹ Thus the relation of knowing is external to the objects known. Since knowledge does not change or modify the objects, we may know things as they really are. Hence the relation of knowing is a direct but external relation between the subject or the mind which knows and the objects or things that are known.

The doctrine of external relations has an important bearing on metaphysical theory. It leads logically to a pluralistic theory of the world. The objects of the world are no doubt related to one another in various ways. But if their relations are external, then the existence and nature of each object would be independent of all the rest. And in that case there would be many independent realities in the world. We cannot reduce any object of the world to any other object; nor can we derive all objects from any

¹ Spaulding, *Op. cit.*, p. 315.

one single principle or reality which would be inclusive of them all. The world will thus be a plurality of reals which may be related to one another in diverse ways, but will be neither dependent on nor fundamentally affected by their relations. This is the theory of pluralism in metaphysics. Such a pluralistic theory of the world is advocated by the upholders of the doctrine of external relations. William James strongly supported this theory. For him, 'Pluralism or the doctrine that the universe is many means only that the sundry parts of reality *may be externally related*. Things are with one another in many ways, but nothing includes everything, or dominates over everything'.¹ It would thus appear that pluralism depends on the doctrine of external relations.

Let us now consider the arguments for and against the doctrine of external relations.² In support of this doctrine it may be pointed out first that experience gives evidence of various sorts of discontinuities among the objects of the world. The connections which we find among them are in many cases mere conjunctions which afford no good ground for our passing from one object to another. The relation of conjunction seems to be purely accidental and, therefore, external to the terms conjoined. Two balls moving from opposite directions may meet at a point and become conjoined to each other. The conjunction between them is an accidental and external relation which does not affect the balls in any way. They would exist all the same when next moment the conjunction is destroyed. Similarly, the connection between horns and cloven hoofs which we find in certain animals seems to be no better than an accidental concomitance for which there is apparently no reason what-

¹ James, *A Pluralistic Universe*, p. 321.

² For a fuller discussion see Brand Blanshard's *The Nature of Thought*, pp. 453 ff. Some of the arguments mentioned here have been taken from this book.

soever. It would thus appear that the relations which we find among the objects of experience are not in any way grounded in their nature, but are purely external to them.

The second ground for the reality of external relations is afforded by inductive logic. Induction is the logic of scientific method. It lays down the methods or canons which science must follow in its investigation of nature and for the discovery of natural laws. But each of the experimental methods of scientific inquiry proceeds on the assumption that only certain things are relevant to a certain event or effect, while all others are irrelevant to it. The validity of science and also of the inductive methods depends on the admission of the fact that many of the relations among things are accidental and that they do not affect in any way the things related by them. This virtually amounts to the admission that many of the relations are external to the related terms.

The third argument in support of the externality of relations is drawn from the nature of biological analysis and inference. Any whole may be analysed into its parts, and the nature and arrangement of the parts supply the character of the whole. This means that the parts of a whole have each its own nature and that they stand in certain relations to one another and to the whole. The being of the parts is thus independent of their relations. The parts are what they are in virtue of their content and nature, and they also bear certain relations to one another and to the whole. The relations thus fall outside their being and are only added to it, i.e. they are external to the parts. Similarly, all syllogistic inference depends on the identity of the terms of which it consists. When, for example, it is argued: "All men are mortal; Socrates is a man; therefore, Socrates is mortal", we have three terms, each occurring twice in the argument. The validity of the argument requires that the

middle term *manhood* as related to mortality is identical with the manhood present in Socrates; the major term 'mortal' is the same both as related to man and to Socrates; and the minor 'Socrates' is the same both as related to manhood and to mortality. If this be so, we must admit that the same thing may be related to different things without being itself made different thereby. And this plainly means that relations do not affect the terms related by them and are, therefore, external.

✓ Still another argument to support the doctrine of external relations is drawn from mathematics. Here it is pointed out that numbers remain the same and unaffected through all possible forms and embodiments. Thus the number ten is the same in all its forms, e.g. $1+9$, $2+8$, 2×5 , and so on. The relation of 'ten' to any of its possible forms is thus unessential and unimportant for it. So also, the relation of a number to concrete things is a matter of accident for both. The number three is indifferently true of the sides of a thing, of three books, three apples and so on. Again, the sides of a thing or the number of books or apples may be more or less than three, and still there would be sides and books or apples. This also shows how the quantitative relations among things are purely external and accidental.

We may now consider some of the arguments against the doctrine of external relations. It has been pointed out first that the discontinuities in nature, on which the doctrine relies so much, are more apparent than real. That we do not or cannot *now* find any real connection between two things like horns and cloven hoofs, is no reason for there being no such connection between them. This may be due entirely to our ignorance about the nature of those things. The history of science gives us numerous instances in which what was once supposed to be purely external and accidental to a thing was found in the light of further and deeper

knowledge to be grounded in the very nature of the thing and to obey the laws of nature. In fact, any scientist or philosopher who believes in the reign of law in nature, cannot treat anything or any relation between things as purely accidental or external.

Secondly, it may be pointed out that the argument drawn from the methods of induction does not really prove that while certain things are relevant to a certain effect, others are quite irrelevant to it. Relevance is a matter which is relative to our interests and purposes. What is relevant for a certain purpose may not be so for another, and *vice versa*. Again, relevance is always a matter of degree. In respect of any event or effect certain things may be immediately relevant, while others may be remotely so. The former are said to be more, and the latter less, relevant to the effect. In the production of an effect, say an earthen jar, the potter, his instrument and the clay have a relevance which is immediate. The space occupied by them and the time at which they function may not be immediately relevant. But for that we cannot say that these things are utterly irrelevant to the effect. Without space and time, the material and other causes of the jar cannot function. That the inductive methods are not specially concerned with such universal and relatively passive conditions of an effect is no reason for our saying that they are totally irrelevant to it. In fact, it may be seriously questioned whether the inductive or experimental methods of science which aim at discovering natural causes and laws give us the ultimate truths about the world. All that we seem to be logically justified in saying is that they help us to determine the immediate natural conditions of an apparently physical phenomenon. But this may after all be an approximation to or an aspect of the final truth about natural phenomena. It follows

from this that what is irrelevant and external to a certain thing from the standpoint of inductive logic may not be so in reality.

Thirdly, it has been urged by Professor Taylor that 'it is at least hard to see how any relation can be ultimately external to its terms.'¹ We cannot have two terms in a relation unless the terms are somehow discriminated. Without some sort of discrimination the terms will not be two and there cannot be any relation between them. This, however, requires that there must be some difference between the terms to serve as a basis for their discrimination. So we have to admit that the relation of difference is fundamental to the being of the terms and that any relation which is based on it cannot be ultimately regarded as external to them.

Fourthly, it has been urged against the doctrine of external relations that it leaves all relations unexplained and unintelligible. Thus Bradley points out that on this view relations are 'mere conjunctions' and mere conjunctions are 'irrational'. In fact, 'no conjunction can in the end be a mere conjunction and be barely external'. For, 'if the terms from their inner nature do not enter into the relation, then, so far as they are concerned, they seem related for no reason at all, and, so far as they are concerned, the relation seems arbitrarily made'.² Professor Taylor likewise says, 'it seems unthinkable that *all* relations should be in the end external to their terms. If no relation in the end makes any difference to its terms, and thus has no foundation in their nature, it becomes a standing miracle how or why the terms should enter into relations to which they are all the time absolutely indifferent'.³ Professor

¹ A. E. Taylor, *Elements of Metaphysics*, p. 147.

² F. H. Bradley, *Appearance and Reality* (2nd edition), pp. 514, 523.

³ A. E. Taylor, *op. cit.*, p. 148.

Joachim also argues that the theory of external relations makes all relations of things arbitrary and irrational coincidences, so that 'external relation' is not an answer to the problem how things can be related and yet not cease to be independent but only a name for the problem to be solved'.¹ In fact, 'a purely external relation is in the end meaningless and impossible'.²

Another argument against the theory of external relations is drawn from instances of relation in which the terms seem to be affected by their relations to one another. The relation between a cause and its effect makes a real difference to each of the related terms. The cause apart from its relation to the effect will not be a cause, and the effect taken out of relation to the cause will cease to be an effect and even a fact. The relation between a substance and its qualities is an inseparable relation on which both terms depend for their existence. Qualities cannot exist unless they are in a substance, and a substance without qualities is inconceivable. Likewise the relation between an organism and its parts is such that we cannot destroy it and yet leave the terms unaffected and intact. The organism as a whole is in its parts and the parts also live by their relation to the whole. In these and certain other cases we cannot say that the relations are external in the sense that they do not affect the terms related by them or that the terms may pass out of those relations and yet remain what they were before. The theory of external relations, therefore, fails to explain all relations of things as external. But here we should note that many of the advocates of 'external relations' would admit that some relations are not external but internal. G. E. Moore, for example, maintains that while 'some relations are inter-

¹ H. H. Joachim, *The Nature of Truth*, pp. 43-50.

² *Ibid.*, p. 11.

nal in a sense, 'others, no less certainly, are not, but are purely external'.¹ What 'internal relation' means and what the theory of internal relations stands for, and whether relations are external or internal we shall consider in the next chapter. \ /

¹ G. E. Moore, *Philosophical Studies*, p. 277.

CHAPTER X

THE THEORY OF INTERNAL RELATIONS

The theory of internal relations is generally advocated by the idealistic thinkers as against the realists who uphold the doctrine of external relations. But while the advocates of external relations usually hold a qualified position and admit that *some* relations are internal, the supporters of the doctrine of internal relations are usually more uncompromising and maintain that all relations are in the end internal and none barely external. What then is meant by 'internal relation'? Every relation holds between certain things called the terms of the relation. When the relation is such that it enters into the being of its terms and affects their nature and existence, it is called internal. Internal relation is grounded in the nature of the terms related, so that the terms would not be what they are apart from the relation. It is thus a necessary relation between the things related, for it exists within and constitutes an essential aspect of the things, and we cannot take them out of the relation without prejudice to their nature and existence. If two things are internally related we are to understand that it is their very nature to be related in that way and that they would not *be* if they cease to be so related. Thus there is an internal relation between mind and consciousness, a body and its extension. A mind is what it is in virtue of its relation to consciousness and the latter also cannot *be* unless it is related to a mind. The two are essentially related to each other in so far as it is their very nature or essence to be so related. Similarly, a body and its quality of extension are internally related inasmuch as we cannot have the one apart from the other without destroying

them both. Bradley who is an advocate of the theory of internal relations declares that 'relations are all intrinsical' in this sense. He says that 'a relation must at both ends affect, and pass into, the being of its terms', and that 'every relation essentially penetrates the being of its terms, and, in this sense, is intrinsical'.¹ Professor Joachim, who also accepts the same theory, holds that 'all relations are internal in the sense that they qualify or modify or make a difference to the terms between which they hold, and that no terms are independent of any of the relations in which they stand to other terms'.² Another characteristic of internal relation is that it implies one unity or complex whole within which the related terms are included as parts. If A and B are related, it must be because there is some unity which holds them as different parts of itself. There can be no relation between two absolutely simple and independent entities like Leibniz's monads. If things are related that means that they are somehow parts of one whole. Two colours are related as similar to or different from each other in so far as both belong to the class of colours. One physical object is on this or that side of another, inasmuch as both are contained in one space. It is probably in view of this that Ewing says that 'etymologically internal relations should mean relations between elements within a given whole'.³ Both Bradley and Professor Joachim are emphatic on this point. The latter tells us that 'so far as A and B are related, they are *eo ipso* interdependent features of something other than either of them singly; and that if A and B really are each absolutely simple and independent, it is nonsense to say that they also are really related'.⁴ So also Bradley says: "A relation between

¹ Bradley, *Appearance and Reality*, pp. 322, 347.

² Joachim, *The Nature of Truth*, pp. 11-12, 43-50.

³ A. C. Ewing, *Idealism*, p. 118.

⁴ Joachim, *op. cit.*, p. 12.

A and *B* implies really a substantial foundation within them. This foundation, if we say that *A* is like to *B*, is the identity *X* which holds these differences together. And so with space and time—everywhere there must be a whole embracing what is related, or there would be no differences and no relation''.¹ He tells us further that without a substantial whole within which the related terms fall, not only the relation, but the terms also would be destroyed. "Relations", says he, "are unmeaning except within and on the basis of a substantial whole, and related terms, if made absolute, are forthwith destroyed''.²

Ewing distinguishes ten different meanings of 'internal relation'.³ This would suggest that there is a good deal of ambiguity in the sense in which the phrase may be or has been used. Without making any attempt to enumerate here the different meanings of it, we may say that 'internal relation' means (1) that the terms related have no independent existence and nature of their own apart from all relations, (2) that they are what they are in virtue of their relations to one another, (3) that their relations are essential to and inseparable from them, (4) that they cannot be taken out of the relations without changing their nature and even destroying them, and (5) that the terms related must be held together as different parts of one whole. Professor Blanshard very well explains the main positions in the theory of internal relations when he says that 'put more formally, the theory is this: (1) that every term, i.e. every possible object of thought, is what it is in virtue of relations to what is other than itself; (2) that its nature is affected thus not by some of its relations only, but in differing degrees by all of them; (3) that in consequence of this and the further fact that everything is related in *some*

¹ Bradley, *op. cit.*, p. 18.

² *Ibid.*, p. 125.

³ Ewing, *Idealism*, pp. 119 f.

way to everything else, no knowledge will reveal completely the nature of any term until it has exhausted that term's relations to everything else'.¹

The theory of internality of relations leads to some important consequences in epistemology and metaphysics. All relations being internal, knowledge as the relation between subject and object must enter into and affect the nature and existence of both. Knowledge would thus be internal to both the subject or mind that knows and the objects that are known. Hence the nature and existence of the objects of the world depend on their being known by the mind. Apart from this relation to the mind there would be neither objects nor the world of objects. Secondly, it must be admitted that the knowledge of any one object involves the knowledge of its relations to all other objects and of the whole system of objects, since every object is in *some* way related to every other object and to the whole system of objects. So all our ordinary knowledge about objects will be partially true, and different cases of human knowledge will reflect different degrees of truth, since no human knowledge can exhaustively know the entire system of objects. If there be any knowledge which includes all objects with all their relations, i.e. which is as wide as the whole system of objects, then we will have the truth, real and complete. So there will be but one truth as the systematic coherence of all experiences of objects in one organised individual experience. Thus the doctrine of internal relations leads logically to the coherence theory of truth and the belief in degrees of truth. It also leads to monism in metaphysics. On the theory of internal relations, things cannot exist apart from their relations to one another. The nature and existence of every object depend on its relations to all other objects. The objects of the world,

¹ Brand Blanshard, *The Nature of Thought*, V. II, p. 452.

including physical things and conscious minds, are what they are because of their necessary relations to one another. But if they are thus related internally, that must be because there is a higher unity or larger whole within which they are all contained as parts. This unity or whole must be one, universal and all-inclusive. For, if there be other wholes to which it is related, then these must all be included within a supreme whole or system of wholes. Thus we are led to the view that the objects of the world—minds, selves and physical things—are not independent and isolated realities but interdependent parts or factors of one absolute reality. There must be a single supreme system or reality within which all things are internally related to one another, and all things must be dependent upon their relations to other things and to the whole system of things or the supreme reality. Russell rightly observes that 'it is evident that if reality or truth is a significant whole in Professor Joachim's sense the axiom of internal relations must be true'.¹

Let us now consider the arguments that have been advanced for and against the theory of internal relations. In support of this theory it has been argued first that the very being of anything depends on its relations to other things. A thing is something in so far as it is different from other things. According to Hegel, if a thing is to *be* at all, it must be this *rather than that*, and the 'rather than that' belongs as truly to its essence as the 'this'.² Take, for example, a table. The being of a table depends as much on the presence of a table-character in it as on the absence of other different characters from it. It is a table in so far as it is not a chair, a stool, a plough-share, a tree, an animal

¹ Bertrand Russell, *Philosophical Essays*, p. 161.

² Cf. Hegel's *Science of Logic*, V. I, p. 138 (Eng. Tr. by Johnston and Struthers).

and so on. If it were not, on the one hand, similar to other tables and, on the other hand, different from whatever is not a table, it would not really be a table. Thus it becomes a table by virtue of its relations of similarity to other tables and difference from all non-tables. If any of its relations to these other objects changes, i.e. if it ceases to be similar to any other table or to be different from what is not a table, then it would cease to be a table. This shows how a thing's relations to other things determine the nature and existence of that thing and are, therefore, internal.

Secondly, it has been argued by Bosanquet that 'relations are true of their terms. They express their position in complexes, which positions elicit their behaviour, their self-maintenance in the world of things'.¹ This means that relations express the nature of the terms related by them. If they were purely external, we cannot sensibly speak of them as true of the terms. This point has also been urged by Bradley.² 'If a relation,' asks Bradley, 'is external to the terms, how can it possibly be true of them?' 'It is commonly supposed that by comparison we learn the truth about things; but now, if the relation established by comparison falls outside of the terms, in what sense, if at all, can it be said to qualify them? And of what, if not of the terms, are the truths got by comparison true?' To say that they are true of the terms is to say that they are not made true by us but by the terms themselves. In fact, if truth is truth it cannot be made by us, and what is only made by us cannot be true. It follows from this that relations which are true of the terms are made true by the nature of the terms themselves and are, therefore, internal to them.

Thirdly, it has been argued that relations are grounded in the natures of the related terms. The relations between

¹ Bosanquet, *Logic*, V. II, p. 278 (2nd. ed.).

² Bradley, *Appearance and Reality*, pp. 514-18.

two things are determined as least partly by the nature of those things. Thus if there is to be a spatial relation between two things like 'one being to the west of another', the things themselves must be spatial. This is the reason why physical substances can have spatial relations which abstract qualities like virtue and justice cannot have, and these moral qualities can have moral relations which cannot hold between physical things. Of two houses it might be said that one is to the west of the other, but this cannot be said with regard to two qualities like virtue and justice. Again, justice may be said to be nobler than courage, but one house cannot be said to be nobler than another in the same sense. Thus if the nature of the terms were different, the relations also would be different. This shows that relations arise out of the natures of the related terms and are thus internal to them.

Fourthly, it has been urged that if two things have a certain relation, then they cannot but have it, and if they did not have it they would be different. If A and B are related in a certain way, then anything not so related must be other than A and B. Hence there must be something in them which is essential to their being related as they are. Both Russell and Moore treat this argument in support of internal relations as fallacious. But in the case of some relations we have to admit that the related terms would be different if they did not have the relation in question. Moore himself admits that 'the quality "orange" is intermediate in shade between the qualities, yellow and red'. Now orange which has this relation of being intermediate between yellow and red, cannot but be so related to them, and anything which is not so related to these two colours must be different from orange. Likewise, yellow and red which have certain relations to each other and to orange cannot but have them, and qualities which have not these

relations must be different from yellow and red. Some relations, therefore, affect the terms related and are thus internal. These relations give rise to what Moore calls "relational properties" and recognises as "internal to" their terms. But while he thinks that only some relational properties are really internal and others external to their terms, the advocates of internal relations hold that all relations give rise to relational properties which are internal. The relations of the terms could not be different without the properties also being different, since a term with a certain relation is different from one without it. The properties, again, could not be different without a difference in the nature of the terms because their nature consists of their properties. Thus with regard to all relations it may be said that if they were different, their terms also would be different. And this means that all relations are internal.¹

Fifthly, it has been pointed out by some idealists that we can sometimes argue from one fact to another and this would be impossible if the two were not internally related.² Given certain facts as data we can infer certain other facts as following from them. Thus we can infer future rain from the presence of heavy dark clouds in the sky and forecast meteorological phenomena from present weather conditions. All this could not be done if these facts were not so connected that one naturally passes into the other, *i.e.* if they were not internally related.

Further, it has been argued by both F. H. Bradley and Professor Joachim that if things are not related by their very nature, then no relations can possibly bring them together. If A and B are two entities which are independent of each other and of any relation to each other, then any

¹ Vide Russell, *Philosophical Essays*, pp. 164 f.; G. E. Moore, *Philosophical Studies*, pp. 286 f.

² Cf. Bradley, *Essays on Truth and Reality*, p. 259.

relation which may be supposed to hold between the two would be a third entity independent of both. As such, the relation itself would require other relations to relate it to A and B on both sides of it. These relations, again, being independent of the first, would require still other relations to relate them to the first and so on *ad infinitum*. Hence no relation can relate the terms unless they are related in themselves, i.e. are internally related. 'A relation', says Professor Joachim, 'which really *falls between* two independent entities, is a third independent entity which in no intelligible sense relates the first two'.¹ Likewise Bradley says, 'the problem of relation is not solved by taking relations as independently real. For, if so, the qualities and their relation fall entirely apart, and then we have said nothing. Or, we have to make a new relation between the old relation and the terms; which, when it is made, does not help us. It either itself demands a new relation, and so on without end, or it leaves us where we were, entangled in difficulties'.²

The last and the most important argument for the theory of internal relations is based on the law of causation. The law of causation is universal, it governs all things and beings of this world. With regard to any object of the world, be it a physical thing, an organic body or a conscious mind, it may be said that it always acts on and is acted upon by other things. Everything of the physical world is conditioned in its origin and development by certain other things which in their turn are conditioned by still other things and so on without end. Again, while one thing is causally related to certain other things directly, it is so related to all other things indirectly. As Alexander says, 'there is ultimately some direct or indirect causal connection

¹ Joachim, *op. cit.*, p. 11.

² Bradley, *Appearance and Reality*, p. 18.

between all finites'.¹ Scientists tell us that light-waves travel from every part of space to every other part and so between all physical objects. We see for ourselves how sound-waves travel from one end of the world to the other and affect our ears at both ends. According to Sir James Jeans, science has made it practically certain that 'every body pulls every other towards it, no matter how distant it may be. Newton's apple not only exerted its pull on the earth, but on every star in the sky, and the motion of every star was affected by its fall. We cannot move a finger without disturbing all the stars'.²

The idea of indeterminism which has been introduced into philosophy from modern quantum physics does not really disprove the universality of the law of causation. According to the principle of Indeterminacy, the velocity and position of a particle of matter are undetermined. But from this we should not conclude that these are uncaused. It is now almost fashionable for some philosophers to say that since there is an element of indeterminism in the movement of the sub-atomic particles we are to say that all actions including those of human beings are undetermined and free. But as J. E. Turner has pointed out, "The use to which the Principle of Indeterminacy has been put is largely due to an ambiguity in the word 'determined' ". Commenting on this Russell observes that 'there is nothing whatever in the Principle of Indeterminacy to show that any physical event is uncaused'. It may be undetermined in the sense that it cannot be quantitatively measured, but it is determined in the sense that it is caused. On the whole, we may, therefore, say that all things are causally related, either directly or indirectly.

Now if all things are causally related, it follows that

¹ Alexander, *Space, Time and Deity*, V. II, p. 152.

² *The Stars in their Courses*, p. 72.

they are related internally, for causality is an internal relation. The causal relation enters into the being of the terms related so much so that the terms are what they are in virtue of the relation. Neither the cause nor the effect can exist without relation to the other. Further, the causal relation is such that it follows from the nature of the terms themselves. A cause by its very nature leads to the effect and the effect in its turn expresses the nature of the cause. If fire burns and water cools, it is their very nature to lead to such and such effects and the effects are by their very nature related to such and such causes. Again, the causal relation between two things is a necessary and essential relation. We cannot alter the relation without altering both or, at least, one of the related terms. Thus apart from relation to fire there would be no burning and apart from burning or heat there would be no fire. All this shows that causality is internal to the related terms. If, therefore, all things are causally related, we are to say that they are internally related to one another.

So much for the arguments in favour of the theory of internal relations. But as against the theory, it has been pointed out, in the first place, that none of the arguments offered in support of the theory proves that *all* relations are internal as contended by its advocates. All that they really prove is that only *some* relations are internal to their terms. Thus the first argument for internal relations at best proves that the relation of *difference* of one thing from other things is necessary for and internal to it. If the thing were not different from things other than itself, it would not be the thing it is. But even here it may be urged that a thing must have a positive nature of its own which distinguishes it from other different things. So mere difference cannot be said to constitute the entire being or nature of a thing. Even if this is not admitted, the fact re-

mains that we cannot pass from the internality of the relation of difference to that of all other relations. The same thing may be said with regard to the relation of similarity. A thing's similarity to something is internal to it. But that does not mean that all of its relations must be internal. The second argument which, as we have seen, is employed by Bradley and Bosanquet does not prove that all relations are internal. As Ewing says, 'we cannot pass from the fact that relations are true of their terms to the view that relations are internal in the full sense maintained by Bosanquet himself'.¹ All relations which are true of their terms are not indiscriminately internal in the sense that they affect their terms, only those which express their nature and behaviour may be said to be internal in this sense. The third argument also fails to prove the internality of all relations. For, to say that relations are partly determined by the natures of the terms is to say that they are not fully internal to them. Thus the spatial relation between two things is determined by their spatial characters in the sense that if the things were not spatial, there would be no spatial relation between them. But this does not determine the particular kind of spatial relation that may hold between them. That two things are spatial does not necessarily mean that one must be to the east or to the west of the other and not otherwise. Similar is the case with the causal argument for the internality of relations. If two things are causally related we know that they are related internally. But things have other relations than the causal, and we cannot pass from the internality of their causal relations to that of the other relations among them. Further, even if it be true that the law of causation is universal and that everything must be causally related to something, it does not follow that it must be so related to

¹ A. C. Ewing, *Idealism*, p. 145.

this or that particular thing. So from the general law that things are causally related we do not know all the relations of one particular thing to other particular things. In fact, it is not the case that one thing is causally related to one other particular thing, but to the whole system of things. The existence of a tree, for example, is causally determined not by the seed alone, but by the action of all the physical elements and, through them, by the whole system of things. Hence what the law of causation really proves is that everything is internally related to the whole system of things, and not that it is so related to any particular thing. 28.12.62.

In the second place, we find that Moore and Russell oppose the theory of internal relations on some strong grounds. According to Moore, the theory that all relations are internal means that the terms which have a certain relation would be different if they had not had it. He thinks that what the advocates of the internal theory of relations meant could be put in the form: 'In the case of every relational property which a thing has, it is always true that the thing which has it would have been different if it had not had that property; they sometimes say even: If P be a relational property and A a term which has it, then it is always true that A *would not have been* A if it had not had P'. If A is the father of B, then the characteristic of 'being father of B' is a 'relational property' of A. For example, Edward VII was the father of George V, and had thus the relational property of 'being father of George V'. This relational property is not itself a *relation* in the same fundamental sense in which the relation of fatherhood is so. Those* who talk of all *relations* as being internal, often actually mean by "relations" "relational properties". Now if we say that 'A which has a relational property P, would not have been A if it had not had P', we assert a self-contradictory proposition that 'if A had not had P' it

would not have been true that A did not have P. But what we say here may not imply this self-contradictory proposition. It may mean, as Moore himself admits, that 'if A has P, then anything which has not P is necessarily different from A'. Now what has not P may be different from A which has P, either numerically or qualitatively. That is, what has not P may be *another* A without the relational property P, or it may be something altogether different from A. Moore thinks that in many cases the absence of P entails neither numerical nor qualitative difference from A. If a coloured patch is partly red and partly yellow, we say that 'this whole patch contains this red patch.' Now any whole which does not contain this red patch would be different from the given whole. The particular given whole could not have existed without having that red patch for a part. But the red patch might perfectly well have existed without forming part of that particular whole. Thus we see that while a relational property like 'having *this* for a spatial part' is internal, every property of the form 'being a spatial part of this whole' is not internal, but purely external. Similarly, if A is the father of B, A has the relational property of 'being father of B'. But A might well have existed without having this property. In the case of many relational properties it is obvious that the things which have them as *a mere matter of fact* might well have existed without having them. So the conclusion to which we are led is that all relations are not internal as the theory of internal relations implies, but that some are purely external.¹

Russell² also criticises the idealistic argument that if two terms have a certain relation, they cannot but have it,

¹ Vide G. E. Moore, *Philosophical Studies*, pp. 281 f.

² Russell, *Philosophical Essays*, pp. 164 f.

and if they did not have it, they would be different. This argument, he points out, involves the fallacy of a vicious circle. The argument may be put thus: 'If A and B are related in a certain way, then anything not so related must be other than A and B; hence there must be something in them which is essential to their being related as they are'. But this only proves that what is not related as A and B are, must be numerically diverse from A or B, i.e. it must be numerically different from each of them. It may be some other A or some other B than the two which are related. The argument does not prove that it must be qualitatively different from A or B, i.e. it must have altogether different adjectives and cease to be A or B. This can be proved only if we assume the axiom of internal relations itself and say that what is not related as A and B are, cannot be A or B at all.

Another important argument against the theory of internal relations has been put forward by Russell.¹ According to him, the theory leads to rigid monism which is incompatible with all complexity in the world. If all things are internally related, they would be included as parts or aspects of one unitary whole. Now the relation between these parts and the whole being internal, it would be grounded in their natures. The parts would express the nature of the whole and the whole would express the nature of the parts. The parts by their very nature are related to the whole and the whole by its very nature would be related to the parts. So it is the same nature or reality that is expressed in the whole and its parts. We would thus have only one thing and one proposition attributing one predicate with regard to one subject. Even this one proposition will not be quite true, for it involves a distinction between the subject and the predicate. If the predicate

¹ Russell, *Philosophical Essays*, pp. 168 f.

be not distinct from the subject there would be no predication, not even a false one. But if the predicate be different from the subject, it cannot be predicated of the subject. So we shall have to suppose that predication does not involve the difference of the predicate from the subject and that the one predicate is identical with the one subject. This means that reality is a pure identity having no difference or distinction in it. So there would be no difference and complexity anywhere in the world. But this is obviously contradicted by our experience of many objects in the world. Hence we must reject the theory of internal relations and admit that there are many real things in the world which are externally related to one another.

The long-drawn controversy between the advocates of external and internal relations seems to be due to the want of clear conceptions about relations and things or objects. We say that the things or objects of the world have certain relations to one another. But we do not at the same time carefully consider what a thing and its relation really mean. If we can make our ideas about things and relations clear, then we may expect to see the end of the controversy as to whether relations are internal or external. We should first try to clarify these ideas.

The first question we have to consider is: What is a relation? It may be said at the very outset that relations are not things or substances. Professor Alexander's treatment of the category of relation makes the nearest approximation to the view that relations are as good as things. According to him, relation is as original and elementary a feature of the universe as 'substantive things'. All relations ultimately depend on and express the continuity of Space-Time. Empirical relations of space and time are themselves spaces and times, and are thus homogeneous with the terms related by them. When a relation relates certain

terms it makes a connected whole of those terms. 'Thus a relation may be described as the whole situation into which its terms enter, in virtue of that relation'. Relations are as real and concrete as the things related by them. Relations are external realities when they are relations of external things, and mental realities when they pertain to mental things. But in neither case are they subjective or products of the mind. They are really objective and grounded in the nature of the things between which they hold. Further, Alexander thinks that whether relations are external or internal depends on what we mean by these words. "If to be external means to have a recognisable existence as much as terms have, relations are external". Relations *exist* and are different from the terms related by them. But they do not exist in separation from their terms and are not added to them as a third factor. So far as this is the case, a relation may be said to be internal to its terms. But a relation does not inhere as a quality in the terms. A relation is internal to the terms, not in the sense of being a quality which inheres in the terms, but in that of being something which cannot exist without the terms."¹

It would appear from the brief statement of Alexander's position given above that although he does not actually identify relations with things and maintains the distinction between the categories of substance and relation, yet he comes very near to accepting the view that they are as good as things. This is borne out by the fact that he treats relations as not only real and objective, but also as concrete and existent. 'Relations of space and time', he tells us, 'are themselves spaces and times, and are *homogeneous* with the terms related by them'. But while relations may be said to be real and objective in a sense, we do not understand in

¹ Alexander, *Space, Time and Deity*, V. I, pp. 240 f.

what sense they can be regarded as concrete and existent. It is clear that relations do not exist in the same sense in which things and their qualities or actions exist. A relation does not exist like a sensible fact or a particular in space and time. As Russell¹ tells us, while a man exists and the room in which he is also exists, the relation 'in' which holds between the man and the room, does not exist in the same sense. Relations are not particular existents like chairs and tables. And in so far as this is the case, we cannot treat them as concrete in the usual sense. A thing or a substance with qualities and relations is a concrete entity. It has some kind of self-existence and can be thought of independently of other things. But a relation cannot exist nor can it be conceived, apart from the things or terms it relates. One thing does not belong to another thing in the same way in which relations and qualities belong to things. Again, a relation between two things is not a third thing just in the same sense in which one thing placed between two other things is. From all this we see that relations cannot be treated as things or even as concrete and existent entities.

If relations are not to be regarded as things or substances, can we treat them as qualities in any sense? A quality may be defined as a characteristic which is *in* some substance or thing and cannot be separated from it. It is the kind of entity which is denoted by an adjective, e.g. red, sweet, soft, etc. A quality seems to hang on the thing to which it belongs, and does not refer to anything beyond it. Now in this sense we cannot properly speak of relations as qualities. As J. S. Mill² points out, the qualities of a thing are the attributes which are grounded on the sensations which the presence of that thing to our senses

¹ Russell, *The Problems of Philosophy*, pp. 139-40.

² Mill, *A System of Logic*, p. 43.

produces in our mind. A thing apparently possesses a quality independently of any reference to any other object. But relations are not thus centred in one thing but always require a reference of one thing to other things. A rose may be said to be *red* without reference to any other object. But one thing cannot be said to be *in* or *out of*, without reference to something else. This fact is recognised even by those who would treat relations as attributes or adjectives. Thus Mill considers a relation to be that kind of attribute which is founded on some fact into which one object enters *jointly with* another object. But here Mill fails to see that instead of explaining relation as an attribute he presupposes relation itself as the basis of it. To say that 'a relation is an attribute based on some fact into which one object enters jointly with another object' is just to say that a relation is grounded on some relation, for "jointly with" means really "as related to". The same remark applies to Johnson's idea of relation. He says, 'A relation is properly defined as a "*transitive adjective*", the ordinary adjective being distinguished as intransitive'.¹ This definition has, of course, the merit of recognising the fact that while ordinary adjectives like *red* and *sweet* have no reference to anything beyond the objects to which they belong, an adjective like a relation always implies a reference or transition from one thing to another. But as we have already pointed out, not only ordinary but all adjectives are intransitive in this sense. It is just this character that distinguishes, adjectives from relations. Hence to say that a relation is a "transitive adjective" is not only confusing, but is also to presuppose the idea of relation itself, for to be 'transitive' means to be 'related'.

The view that relations are qualities seems to be implied also by certain forms of the theory of internal

¹ W. E. Johnson, *Logic* I, p. 204 n.

relations. Thus according to one form of the theory, all relations are internal in the sense that they 'fall within the nature of the related terms'. If by the nature of a term or thing we mean its full nature, then it will include all that is predicable of it. Now relations are as much predicable of a thing as its other characteristics and thus become its attributes. This is especially the case when some logicians say that all propositions are of the subject-predicate form. On this view of propositions, even relations would be predicates of the related terms. The proposition 'A loves B' would, on this view, be put in the form, 'A has the character of loving B', or 'A has the predicate of loving B'. But in either case the relation is treated as a quality or adjective of the subject. The converse relations would likewise be put in the form, 'B has the character of being loved by A', or 'B has the predicate of being loved by A'. Here also the relation is treated as a quality of the subject. But the first difficulty in taking relation as a character or quality of things is that we cannot predicate it of things as simply as we can predicate simple qualities of them. While we say simply that 'the rose is red', we cannot as simply say 'A is loving-B'. We have to twist matters a bit and say 'A has the character or predicate of loving B'. This shows that it is not the relation but the 'relational character or property' that is predicable of things. Some Indian logicians who do not recognise 'relation' as a separate category bring many of the ordinary relations among things under the category of quality (*guṇa*). Thus the Nyāya-Vaisesikas consider such relations as distinctness, conjunction, disjunction, remoteness, nearness, etc. as qualities of the things which have these relations. These relations seem to lend themselves to the qualitative interpretation more easily than other relations like 'loves', 'hates', 'is between', 'to the

west of', etc. When 'A is conjoined to B', or 'A is near B', it seems that A acquires a qualitative character like 'conjoined to B' or 'near B'. But even here the difficulty of treating these characters as really qualities remains. While a simple quality like 'red' or 'sweet' inheres in one thing, these characters must equally belong to two things or more. Hence they can hardly be treated as qualities proper and simple. The second difficulty in treating relations as qualities is that it leads to a vicious infinite regress. If relations are qualities, they will not do the work of relating, but would themselves require other relations to relate them to things. But these other relations also being really qualities would need still others, and so on *ad infinitum*. Thirdly, as Bradley points out,¹ relations cannot be reduced to qualities, for 'qualities are nothing without relations'. Qualities without relations are unintelligible and they cannot be found at all. A quality is a particular character different from other characters. If there are no differences, there are ~~no~~ qualities, since all must fall into one and be simply a homogeneous mass. But if there is any difference, then that implies a relation. It is not possible for us to think of qualities without thinking of distinct characters. But we cannot think of these characters without the relation of difference between them. So it is not possible for us to treat relations as simply qualities. Nor can we treat qualities as relations. Bradley and Bosanquet both tell us that 'relations cannot be reduced to qualities, nor qualities to relations'.²

It would appear from the foregoing discussion that relations are neither things or substances, nor the qualities of things like red, round, sweet, etc. This fact has led some thinkers to treat relations as universals. Thus

¹ Bradley, *Appearance and Reality*, 2nd. ed., pp. 21-25.

² Bosanquet, *Logic*, 2nd. ed., p. 279.

Russell holds that relations are 'the sort of universals generally represented by verbs and prepositions.' By a universal he means that which is other than particular things, but may be shared by many particular things. 'It is something other than particular things, which particular things partake of. Not being particular, it cannot exist in the world of sense. Moreover, it is not fleeting or changeable like the things of sense: it is eternally itself, immutable and indestructible'. Thus like Platonic ideas, universals are opposed to the particular things which are given in sensation and which exist in the physical world. But for this, it must not be supposed that they are ideas in our mind and are, therefore, mental. The being of universals does not depend on their being thought of or in any way apprehended by minds. Universals subsist in their own right in the world of being, but they may be apprehended by minds. Justice and whiteness are such universals represented by qualities. The quality of justice is different from just acts, but is something common to them all. Similarly, whiteness is a universal in which all white things participate. But while just acts and white things are particular objects which exist in the physical world, justice and whiteness are not particular facts like them. Still, they are no less real than the particular facts. Rather, the particulars are what they are by participation in the corresponding universals. Now relations also are universals generally represented by verbs and prepositions. Take for example, the relation 'loves' or 'is to the north of'. The first relation may hold between any two persons, and the second between any two objects which are physical. 'Loving' is a relation which may hold between two or more persons and is common to them, but it is not confined to any pair of them. Likewise, the relation of 'being to the north of' may be true of many things and so com-

mon to them. But while the persons or things can be perceived to exist in space and time, these relations do not exist in the physical world. There is no place or time where we can find the relation "north of". Nor can we say that it is in our mind. If A is to the north of B, then that relation will be true of them even when no mind knows anything about it. Thus the relation is neither in space nor in time, neither material nor mental; yet it is something. What is true of this relation is also true of all other relations. They are common to many particular things, but are not themselves particular things or sensible objects. As such, they must be treated as universals and placed in a world which is neither mental nor physical.¹

Apart from the difficulty of conceiving universals as entities which only *subsist* but do not exist in the spatio-temporal world, there are two main grounds on which the above view of relations seems to be unacceptable. If relations are universals, they are neither physical nor mental entities and must be placed in a world which is neither physical nor mental. But in that case, we do not see how they relate mental and physical objects. If relations are neither material nor mental, and if they do not belong to the physical or the mental world, it is difficult to understand how they bear on physical and mental objects and bring them together in the way in which they seem to do in our experience. Physical things and minds, we say, exist and are related in space and time. But if these relations are neither in space nor in time, we can hardly speak of them as the spatial and temporal relations of things and minds. Secondly, relations cannot be reduced to universals because a universal itself depends on relations. A universal, we are told, is that which is common to many particular objects. It is the

¹ Vide Russell, *The Problems of Philosophy*, pp. 139-154.

common nature or character of many particular objects. But that things have a common nature means that they resemble one another in some respect or respects. So, it is the relation of resemblance among many particular objects, on which the recognition of a universal depends. Further, a universal is what is related in the same way to many particulars and cannot have being apart from that relation. Thus tableness as a universal must be related to all tables and its being depends on such relation. Hence universals are what they are, because of their relation to many particulars. From all this we see that universals depend on relations and that to explain a relation as a universal is to presuppose it. What the nature of universals really is we shall consider more fully in the next chapter.

So far we have seen that relations are not sensible facts like things or their qualities and activities. While things or substances and their qualities and activities may be said to exist and to be perceived by us, the relations between them cannot be said to exist and to be perceived in the same sense. A thing like a table, the brown colour that belongs to it and the resistance it offers to our hand when pressed against it, are all sensibly present and perceived by us. But the relation 'in' between the table and the room in which it exists, or that of 'being owned' between the table and its owner cannot be said to be a sensible fact perceived by us in the same way. Now by facts we generally mean entities which exist in space and time, e.g. physical things, minds, and their qualities and actions. As such, what does not exist in space and time is not regarded by us as a fact. The objects of the world are found to possess certain values for us. They are regarded by us as beautiful or ugly, good or bad. But while these objects are regarded as so many facts, their

values are not so regarded by us. Hence values are not facts like the things which possess them. Since relations also do not exist in space and time, we are to say that they are not facts like the things, qualities and actions between which they hold. It might be said here that relations also are facts, but they are facts of a different kind from those that exist in space and time. While the latter are existent facts, relations are *subsistent* facts or entities. This seems to be the view implied by Russell's theory of relations as universals. But what a subsistent entity other than existent facts is, we can hardly make intelligible to ourselves. We can understand what a physical or mental fact is, but we cannot properly understand what a subsistent fact which is neither physical nor mental is like. Of course, we do not deny that it is something. But it seems to us better not to call it a fact at all. Values, for example, are neither facts nor fictions; rather they are the expressions of our feelings of appreciation of facts. Relations also are not fictions, although they are not to be treated as facts. Relations are not facts but the ways or forms of ordering facts. They stand not for facts but for the order and arrangement among facts. The facts are the terms of a relation, and the relation is the way in which the terms are ordered and arranged in our experience. The ordering of the terms has reference to a whole or system on the one hand, and to the action or function of the terms within that system on the other. Thus a relation is an order among facts relatively to their action or function in a system. The relations among the players in a football game have reference to their respective functions in the game as a system or whole. Their relations are just the ways in which their activities are ordered and adjusted in the course of the game. Apart from reference to their activities in the game, there would not be the

relations which we find among them. It follows from this that things which do not act on and affect one another within one system will have no relations. This is the reason why in the absence of any interaction Leibniz's monads cannot properly enter into any relations with one another. It follows also that the same terms will have different relations according to their functions in different systems. The same books in the same library will stand in different relations to one another when they are ordered and arranged according to such different principles as size, colour, subject-matter and language. Another consequence of our view is that if certain terms are incapable of functioning as members of a particular system, they will have none of the relations which imply that system. Relations like 'far', 'near' 'north of' etc. imply the spatial system. Things which do not exist in space, i.e. do not belong to the spatial system cannot have these relations. Thus we cannot sensibly talk of virtue being to the north of vice. Similarly, inanimate objects which do not belong to the moral system cannot have moral relations. One stone cannot be said to be more virtuous or wicked than another. Ordinary relations like 'in' and 'upon', 'before' and 'after' require that their terms must belong to and function within the spatio-temporal system. When one thing contains or supports another thing in space, we say that the second is 'in' or 'upon' the first. These relations thus express the ways in which the actions of two things are ordered in space. Similarly, when one thing precedes or succeeds another thing in time, we say that the one is before or after the other. This is how their actions are ordered in time. Hence we say that relations are not facts but the ways or forms in which facts are ordered and arranged in a system.

The many ways in which facts are or may be ordered,

and consequently, the many relations which we find among them are not all of the same kind. Certain types of relations seem to be more fundamental than others so far as the related terms are concerned. Some relations are universal and necessary for all facts, some seem to be necessary for certain facts, while others do not appear to be necessary for many facts. If by facts we mean, as we do mean, entities which exist in space and time as so many particulars, then among facts we are to include physical things, minds, their qualities and actions. All such facts by their very nature require to be related in space and time, and by causality. Particular facts are what they are by virtue of these relations. Facts like things, qualities and actions cannot *be*, unless they are in space and time and are causally related to one another. Likewise, one fact is a particular of a certain kind in so far as it differs from other facts and resembles some facts. One table is a kind of particular fact because of its resemblance with other tables and difference from whatever is not a table. It would thus appear that the spatial, temporal and causal relations as also the relations of difference and resemblance are the most fundamental of all relations. These and other fundamental relations we propose to call *constitutive relations* in so far as they determine the nature and existence of the terms related by them. There are certain other relations which, although not fundamental for all facts, seem to be necessary for the facts related by them. These relations are not constitutive of all facts, but only of those that are related by them. A man's or woman's relation to a son or daughter is what makes him or her a father or mother. Apart from relation to some child, a man would not be a father, nor a woman a mother. Of course, he may be a man or she may be a woman

without a child, but not a father or a mother. Thus the relation to some child enters into the connotation of *father* or *mother*, and is so far constitutive of each of them. Contrariwise, one would not be a son or a daughter apart from relation to both a father and a mother. To be a son or daughter is to be necessarily related to one's parents. Similarly, if one is to be a teacher one must be related to a student, and if one is to be a student one must be related to some teacher. Without these relations one may be a man or a boy, but not a teacher or student. Thus these relations enter into the connotations of *teacher* and *student*. As distinguished from these constitutive relations, there are some relations which are non-constitutive in the sense that they do not determine the being and nature of the related terms as we understand them. When a book is on a table, the relation 'on' or 'upon' which relates the one to the other does not appear to be constitutive of either. The book or the table has being only as it is in space and time and is the effect of some causes and conditions. Further, the relation of the book to some subject-matter, author and language is a part of the connotation of *book*. There cannot be a book without relation also to these things. What a book is apart from its relation to some subject, author and language, we cannot say, because there is then no book at all. But the relation 'on' in which the book stands to the table does not enter into the being or the connotation of either. The book which is now on the table may be removed elsewhere and its relation to the table cease. But even then the book remains a book and so also the table. Neither the existence nor the nature of the book or the table is affected thereby. Such relations which do not form a part of the being or connotation of the terms related may be called *non-constitutive relations*.

Now we are in a position to decide the controversy as to whether relations are internal or external. Whether a relation is internal or external depends on the nature of the relation and the terms related. If the relation is in any sense constitutive of the terms, i.e. if it conditions the existence and nature of the terms, it would be internal ; if not, it would be external. From our standpoint all constitutive relations are internal, whereas all non-constitutive relations are external. The relation of 'being in' space and time is constitutive of all physical things, minds (as distinguished from the spiritual self), and their qualities and activities. So also, the relations of 'being caused' by something, 'being different from' other things and 'being similar to' certain things are constitutive or determinative of all objects of the world. An object like the table before me is what it is because it is a substance which has certain qualities and activities and which exists in space and time and is causally related to other things. And as a table it must be similar to other tables and different from what is not a table. Apart from all these relations a table would not be a table at all. Some neo-realists like Russell speak of a real table which is other than the perceived table, and of which the perceived qualities are not directly the properties. But a thing which has no perceived colour, shape, and size, etc., may be a real like atoms or electrons and protons; it can hardly be a thing like a table. Hence we say that such relations as 'being in' space and time, 'having qualities', etc., are constitutive of all things or objects and are, therefore, internal to them. Other relations like 'father of', 'son of', etc. are found to be constitutive, not of all objects, but of those that are related by them. They enter into and determine our concepts of those objects. Apart from such relations the concepts would not be applied to those objects, and they would be

differently conceived by us and thus become different objects. Hence these relations also are internal to the terms related by them. If, however, a relation be such that it does not affect the existence and nature or the concepts of the terms related by it, we are to say that it is an external relation. The relation of a book to the table on which it is placed is, as we have already explained, a non-constitutive and external relation. It might be said here that the full nature or complete conception of an object would involve all its relations to other objects, and, therefore, all its relations would be internal. This is implied in the idealistic argument for the internality of all relations. But here it should be pointed out that we are not yet in a position to say what the ideally complete nature or conception of an object is. We are rather concerned with the actual nature of objects as now known and agreed upon by us. A table may ideally contain the whole universe within it. But if we take it in its ideal character it ceases to be a table and becomes the whole universe and the question of its relation to other things does not arise at all. When we consider the relation between a table and the book placed on it, we are to take them in their accepted meanings as particular physical objects denoted by two different concepts. As such, the relation appears to be external. If, therefore, we take, as we should take, our stand on the accepted notions or conceptions of the things or objects of the world, we must say that while some relations are internal, others are external to the terms related by them.

THE NATURE OF UNIVERSALS

By the universal we mean that which is common to and shared by all the particulars of a certain class or kind. The ordinary objects of our perception like a table, a chair, a red or a white colour, are particulars in the sense that each of them exists in and is limited to a particular part of space and time. They are also different from and exclusive of one another. One table is different from another table and excludes it from within itself. So also is the other table in relation to the first. Similarly, one colour is different from another colour and both cannot *be* at the same point of space at the same time. But while the particulars are thus limited in space and time, and are exclusive of one another, the universal is something which belongs to many particulars at the same time. It is not limited to any particular space and time, but is said to be present in many particulars occupying different spaces and different times. Things of a certain class have something common in them by virtue of which they are grouped together in the same class and called by the same name. Men, cows and swans have, severally, something in common on account of which they bear certain general names and are arranged into certain classes, each of which is different from the rest. Similarly, different colours like red, yellow, green, etc., have something common in them because of which they are all grouped into the class of colours and called by the same name 'colour'. So also, different virtuous acts have something in common, in view of which each of them is called virtuous and all of them are brought under the class of 'virtue', as distinguished from actions of

a different character. Now the *thought* of what all the particulars of a certain class have in common is called a general idea or class-concept, and the *something* which they have in common is called their generality or universal. Thus manhood or humanity is common to all men and is, therefore, the universal in them. Cowness and tableness are in this sense the universals in all cows and tables respectively. Colour as something which is common to and shared by all particular colours is their universal. Likewise, virtue and justice are universals in the sense that they are common to all virtuous and just acts respectively. It will be seen here that the particulars which share in a certain universal are so many concrete cases or examples of that universal. As compared with these, the universal seems to be more or less abstract. Thus different men are but different examples or instances of what manhood is, and different just acts exemplify in different ways what we mean by justice. Hence the particulars which have the same universal in them are called instances of the universal. It will be also seen that while the particulars, like this or that man, this or that just act, exist in space and time, the universals like manhood and justice do not exist in and are not limited by space and time. Manhood as a universal is in all men wherever and whenever they may be. Justice as another universal pertains to and characterises all just acts, be they past, present or future.

So far we have explained what we mean by the universal. We have not committed ourselves to any particular view or theory with regard to the nature of the universal. We have simply said that the universal is something which is common to and shared by all the particulars of a class or kind, and is the ground of their being brought under the same class and called by the

same name. Now the question, we have to ask, is: What is this something that is common to the particulars of a class or kind? In other words, the question is: What sort of entity is this universal? We have also to ask a further question: How is the universal known by us?

The answer given by Plato to the above questions deserves our consideration first, not because it is the best, but because it is typical of all realistic philosophy. Although Plato believed in a separate world of "ideas" over and above the world of sense, he was a realist in the modern sense of the term in so far as he accorded an independent eternal reality to what we call "universals". Plato's "theory of ideas or forms" is substantially a theory as to the nature of "universals". We have, according to Plato, no *knowledge* with regard to things of sense. Knowledge must be true, and it can be true only if it pertains to that which truly is, i.e. is real. The things of sense have such contrary and contradictory characters that no character or quality can be truly ascribed to them. As having no definite and fixed characters of their own, these things of sense cannot be called real. So we cannot have definite knowledge of them; we can only have probable views or opinion about them. Of what, then, is this knowledge? According to Plato, it is of the unchanging "forms" or "ideas" underlying different classes of sensible objects. Wherever several things belong to the same class and are called by the same name, we are to know that there is a common essence in which they all participate. This common essence is what Plato calls an "idea" or "form". The "idea" or "form" is not subject to change or destruction like the things of sense. It is eternal, immutable and indestructible. The things of sense are but copies or reflections of the "ideas", and

what semblance of reality belongs to them is derived from the eternal "ideas". Thus for Plato, universals are real and eternal essences in which the particulars of sense participate and from which they derive a sort of quasi-reality, and we know the universals, not through sense, but through the reason.

Bertrand Russell in his early works advocates a theory of universals which is largely Plato's, with, of course, certain modifications. According to him, universals are entities which are eternal and immutable. The essence of the universal is that it is opposed to the particular things that are given in sensation. 'Whatever is given in sensation, or is of the same nature as things given in sensation, is a particular; by opposition to this, a universal is anything which may be shared by many particulars'. Broadly speaking, proper names stand for particulars, while other substantives, adjectives, prepositions, and verbs stand for universals. We have seen how substantives like man and table stand respectively for the universals 'manhood' and 'tableness'; and adjectives like white, red, just, etc., stand for certain universals like whiteness, redness, justice, etc. Like these, verbs and prepositions also stand for universals. When I say "I like this", the verb "like" denotes something which may be shared by many particulars in so far as different people may like different things. It thus stands for a universal. Similarly, prepositions like 'of' 'upon', etc. represent certain relations which may be common to many things. When we say 'the student of a college', 'the book on the table', the words "of" and "on" express relations which here hold between two couples of objects, but may hold between many other couples as well. They thus stand for universals. The reality of universals cannot be denied. Even if it be possible for us to deny the reality of the uni-

versals represented by adjectives and substantives, we cannot deny the reality of those denoted by verbs and prepositions. Thus it may be said that there are no universals like manhood and whiteness, and that these words stand respectively for the resemblances among different men and white colours. But even then we have to admit that the relation of resemblance which holds between different particulars is so far a universal. And if we have to admit this universal, there is nothing to prevent us from admitting other universals like manhood and whiteness. As to the question: 'What sort of entity is this universal?' Russell's answer is that it is neither mental nor physical. The being of universals is not merely mental. Whatever being belongs to them is independent of their being thought of or in any way apprehended by minds. When we think of a universal like the relation 'north of' between two things, our thought is an act of the mind and is mental. But the object of our thought, namely, the relation is as independent of our thought as the things it relates. It belongs to the independent world which our thought apprehends but does not create. Universals, then, are not mental entities. Nor are they physical entities. By their very nature they are opposed to all particular physical entities. Physical entities exist in space and time. But universals do not so exist in time and space. Mental entities also, like thoughts and feelings, may be said to *exist* in so far as they are in time. Universals being neither in space nor in time cannot be said to exist even in this sense. So Russell thinks that universals do not exist, but they subsist or have being, and their being is timeless. The world of universals, therefore, may also be described as the world of being. The world of being is unchangeable, while the world of existence is fleeting. For Plato, the one is real and the other is semi-real, being but a pale shadow

of the first. But the truth is that both are real, and both are important for philosophy. With regard to our knowledge of universals, Russell tells us that we have an immediate knowledge of or acquaintance with them. 'When we see a white patch, we are acquainted, in the first instance, with the particular patch; but by seeing many white patches, we easily learn to abstract the whiteness which they all have in common and thus learn to be acquainted with whiteness'. In a similar way we are acquainted with other kinds of universals like relations of space and time, resemblance, brotherhood, and so on.¹

Among Indian realists the Nyāya-Vaiśeṣikas² maintain a view of the universal which is similar to that of Russell as explained above. According to them, universals are eternal entities which are distinct from, but inhere in, many individuals. There is the same universal in all the individuals of a class. The universal is the basis of the notion of sameness that we have with regard to all the individuals of a ~~certain~~ class. It is because there is one common essence present in different individuals that they are brought under one class and thought of as essentially the same. Thus the universal is a real entity or essence in things, which corresponds to a general idea or class-concept in our mind. Then, we are told that universals do not participate in existence. They do not exist in space and time, but have being and inhere in substances, qualities and actions or physical movements. There is no universal subsisting in another universal, because there is but one single universal for one class of objects. If there were two or more universals in the same class of things, they would exhibit contrary and even contradictory natures and we could not classify them one way or the other. The

¹ Russell, *The Problems of Philosophy*, chaps. IX-X.

² *Vide*, the author's *The Nyāya Theory of Knowledge*, pp. 180 f.

same individuals could have been men and cows at the same time. In respect of their scope or extent, universals may be distinguished into the highest, the lowest, and the intermediate. 'Beinghood' is the highest universal, since all other universals come under it. Tableness as the universal present in all tables is the lowest, since it has the most limited or narrowest extent. It is present only in all tables, but not in any other kind of things. Substantiality or thinghood as another universal is intermediate between the highest and the lowest. It is wider in relation to universals like earthness, waterness, etc., and narrower in relation to the universal 'beinghood' which belongs to substance, quality and action.

With regard to the knowledge of universals, the Nyāya-Vaiśeṣikas differ from other realists in holding that those which inhere in perceptible objects are perceived by the senses which perceive their locus. They do not, like Plato and Russell, place the universals in a world different and separate from that in which ~~the~~ particulars exist. Both the universal and the particular have being in the same real world, and both are perceived by our senses. The universals of substances or things are perceived by the senses of sight and touch, provided they are visible and tangible things respectively. Thus jarness, treeness and manhood are universals that inhere respectively in all individual jars, trees and men. When perceiving any of these individuals, we directly cognise the universal inhering in it. Similar is the case with regard to our knowledge of the universals pertaining to qualities and actions. These are perceived along with the particulars in which they are. When perceiving such qualities as a red colour, a fragrant smell, a sweet taste and a hard touch, we also know directly, i.e. perceive, the universals of colour, smell, taste and touch as such. When we perceive a particular

kind of movement we know directly what motion in general is. Thus all universals which pertain to sensible objects, are perceived along with the perception of those objects.

So far we have stated that the realistic theory of the universal as held by Plato, Russell (in his early works), and the Nyāya-Vaiśeṣikas in India. Now we are to observe that it involves certain difficulties which make it improbable and unacceptable. Of course, to conceive of the universal as an eternal and unchanging entity or essence is to make it easier for us to think how the same thing may be common to many individuals, as the universal, by its definition, is. But the difficulty is that our actual experience does not reveal any such eternal and indestructible essence in the individuals of a class or kind. All that our experience of the individual objects of the world justifies us in saying is that they are similar in certain respects and different in others. Even if it be true that the similarity of things must be due to their identity on some point, we are to say that the identity is not found to lie in any eternal entity or essence of the type of which Plato and other realists speak. It lies, rather, in certain characters or functions which the individuals of a class possess in common. If the universal were really an eternal entity of the Platonic type and, therefore, having a separate and independent being of its own, we are to say that it stands on the same level with the individuals. It becomes a distinct and separate entity like other individual entities. Further, if universals are placed in a separate world of their own, like the world of "ideas" or "subsistents", we cannot properly explain their relation to the particular existent objects. The universals and the particulars occupy two different and separate worlds and, therefore, can hardly enter into any real relation with one another.

Again, as some Indian nominalists like the Buddhists have pointed out, the above theory of universals as independent and eternal entities which have being in a separate world, has to face special difficulties when new individuals come into existence or old ones pass out of existence. If cowness be the universal in all cows, we are to say that when a cow is born, the universal somehow finds its way to the new individual ; and when an old cow dies it finds its way to some other new individual or back to the world of "ideas" or "subsistents". All this is not only highly improbable but even impossible. ✓ The universals, we are told, are neither physical nor mental entities. But if it be so, we cannot understand how they can move and find their way from here to there. To pass from one thing to another, or from one world to the other, an entity must somehow move, and it can move only if it has a physical character, which the universal has not. It should, however, be noted here that Russell has in his later works abandoned the above theory of universals.

The theory of universals, we have discussed above, may be called 'entitative' in the sense that it takes the universal as an unchanging and eternal entity which is independent of the particulars in which it may be exemplified. • As distinguished from it, we have another theory of the universal according to which, the universal is not an independent entity entering the particulars from outside, but a unity which is *in* the particulars and is realised in the particulars. This is known as the theory of 'concrete universals'. ✓

This theory is Hegelian in origin and has been expounded at great length and defended with great pains by many idealistic thinkers ever since Hegel. Among them, Bradley and Bosanquet are its two chief exponents and we shall follow them first in our account of the theory.

According to Bradley¹, the universal is "the identity of differences". We say that a real thing exists in different places and times and that it undergoes changes of conditions and attributes and yet remains the same throughout these differences. It is thus an identity which appears and remains the same, in differences. The real universal is just such an identity in difference. It has an internal diversity of content. ✓ But amid its diversity or manyness, it still remains one and the same. That sameness can exist together with difference is a fact which cannot be denied. 'To deny it', says Bradley, 'is to affront common sense. It is, in fact, to use words which could have no meaning. If you will not assume that identity holds throughout different contexts, you cannot advance one single step in apprehending the world. There will be neither change nor endurance, and still less, motion through space of an identical body; there will neither be selves nor things'.² When there is change, there is *something* which changes and consequently remains the same throughout diversity. To endure means for a thing to remain the same through successive moments of time. The motion of an identical body means that it remains the same through its different positions in space. What we mean by a self or a thing is also an identity which expresses itself through its changes and in the diversity of its constituent characters. In all these cases, therefore, we see how identity co-exists with difference, and is a real union of differences. By the concrete universal is meant such a real unity in diversity, or an identity in difference.

While the concrete universal stands for a real identity in difference, the abstract universal means the identity of a character taken apart from and independently of differ-

¹ Cf. *The Principles of Logic*, pp. 45, 187 (2nd ed.).

² *Appearance and Reality*, p. 307.

ence. Thus *red* as a quality may be said to be identical in all red things and to have a being independently of their other different characters. These things may differ in all other respects, but the red in them remains identical. The distinction between the concrete and the abstract universal corresponds to that between the concrete and the abstract particular. The concrete particular is a real finite object. Its existence as a finite has certain definite limits which make it finite. These limits exclude it from other things and also exclude other things from it. And it is this exclusion by others and exclusion of others that constitute its particularity. As distinguished from it, the abstract particular is just itself and nothing else. If it has any quality, that would be single and unrelated to all other qualities. It has neither extension in space nor duration in time. It would be something like a momentary point or phase of existence, of which the like is not to be found anywhere in the world. Now, according to Bradley, the abstract universal and the abstract particular do not exist. There is no such thing as an abstract universal like red which is not of this or that shade, or a triangle which is neither equilateral nor isosceles nor scalene. An abstract particular also is not to be verified in experience and we cannot point to anything like it in the real world.¹

'The abstract universal and the abstract particular, then, are what does not exist. But the concrete particular and the concrete universal both have reality, and they are different names for the individual'². What is real is individual, and an individual is that which maintains its unity or identity through the diversity or differences of its characters and conditions. We may look at it from two

¹ Cf. *The Principles of Logic*, p. 187 (2nd ed.).

² *Op. cit.*, p. 188.

different standpoints, from one of which we call it a particular and from the other, a universal. One individual, when set against other individuals, is a concrete particular. The same individual is a concrete universal when regarded as the unity or identity of its different characters and conditions. (By ~~the~~ concrete universal, therefore, Bradley means the self-identity of a thing through the differences of its spatial, temporal and qualitative characters, or through the diversity of its constituent attributes. As such, the concrete universal is, for him, the individual which is a real identity in difference."¹)

Like Bradley, Bosanquet makes a sharp distinction between the abstract and the concrete universal, and takes the latter as one with the individual. The abstract universal stands for any character or characters which are repeated in the same way in a number of things. It has no reference to the differences that fall within any one of these things or hold between one thing and another. It is formed by attending to the common character or characters of a number of things and disregarding their differences altogether. It is thus an extract or an abstract which we get when we omit all the differences of things and retain only that which is identical in them. ✓ It is an identity, no doubt, but it is such in spite of the differences, rather than in and through them, and, therefore, tells us nothing about them. The abstract universal, Bosanquet points out, has many defects. It gives rise to the most artificial classes or groups of things and beings. If, for example, we take an abstract universal like red as the basis of our classification of animals, taken apart from their other characters, we will have a group in which such diverse creatures as red men, horses and cats will have to be put together. The abstract universal also prohibits the consideration of the entire or

¹ *Ibid.*

concrete nature of any thing or individual by itself, since it has to view it in the light of an identity apart from differences. It also closes the possibility of a world or system of which things or individuals are the members. No world or system can be constituted by the identical properties of things, taken apart from all diversity. If things are taken only in respect of their identical properties, we will have a whole or class of repetitions, but not a world of many inter-related things. "It takes all sorts to make a world; a class is essentially of one sort only."¹ Further, the method of abstraction by which we arrive at the abstract universal leads us to suppose that the wider the universal is, the more devoid of content it will be, and the most general knowledge will, therefore, be completely empty. The universal *man* stands only for that which is common to all men and excludes their differences. As such, it would include much less than what is to be found in any individual man. If we rise higher up the tree of Porphyry we see how the wider class ~~animal~~ will have less content than that of *man*. In this way when we come to the highest universal we seem to get a concept which is devoid of all contents, excepting perhaps the idea of mere being. But the idea of abstraction thus implied is altogether wrong. The higher genus is not emptier but richer than the lower ones, since it represents the general plan on which the latter are built.² If, therefore, the abstract universal turns out to be emptier and insignificant in relation to the individuals coming under it, we must look for universals of a different type. These are what Bosanquet calls "concrete universals". The concrete universals are 'identities into which differences enter or which persist

¹ Bosanquet, *The Principle of Individuality and Value*, p. 37; cf. also p. 35.

² Bosanquet, *The Essentials of Logic*, p. 95.

through differences".¹ The concrete universal may be contrasted with the abstract as a centre of radii compared with a superficial area."² The abstract universal includes a large number of particulars and thus covers a large extent of area. It includes all the individuals which share a common predicate, represented by their universal. The concrete universal, however, is the identical centre of reference for different characters, or predicates. 'It is a single subject to which different predicates can be attached. It is a systematic identity which subordinates diversity to itself, or reveals itself as the spirit of communion and totality, within which identity and difference are distinguishable but inseparable points of view.'³ This means that a concrete universal is not an identical character in many things, but the self-identity of a thing in and through the differences of its characters and the complexity of its contents. It is a system which maintains its unity amid diversity, and is the same in and through many different parts and processes. As such, "a world" as a system of many different things and events is a better type of the universal than a class of things which is a whole of repetitions of the same character. Such a world, Bosanquet tells us, is one with the 'Individual'. An ordinary individual, represented by a proper name, is a concrete universal in so far as it is the unity of many different characters and conditions. But the real individual is 'something which is complete and self-contained. It is the ultimately real, and is that which has nothing without to set against it, and which is pure self-maintenance within'.⁴ 'It is the self-contained, self-existent or self-dependent'.⁵ In this sense

¹ Bosanquet, *Logic*, V. I, p. 207.

² *Individuality and Value*, p. 39.

³ *Op. cit.*, p. 40.

⁴ *Op. cit.*, p. 68.

⁵ Bosanquet, *Logic*, V. II, p. 253.

'there can only be one individual, and that, *the* individual, the Absolute.'¹ Therefore, there is really one concrete universal, namely, the Absolute. ✓

The theory of 'concrete universals', as elaborated by Bradley and Bosanquet, seems to be defective in one fundamental respect. It gives us a theory, not of the universal, but of what is not universal, namely, the individual. By the universal we generally mean that which is common to many particulars and is yet distinguished from the particulars. Contrariwise, the particulars are finite and limited objects which exclude one another, but may participate in the same universal. Thus the universal and the particular are correlative to, but none the less, different and distinct from each other. Now an individual is just a particular of the sort herein defined. It is a thing or self which maintains its existence in relation to and distinction from other things and selves. Like the ordinary particulars of experience, such as a colour, a stone, a piece of paper, the individuals also have certain common characters and participate in some universals. It is, therefore, usual to define the universal as that which is common to many particulars or many individuals. Hence there seems to be no justification for identifying the universal with the individual in the way Bradley and Bosanquet have done it. To do so is to ignore an important and accredited distinction between the two, and to violate common usage in philosophy. ✓ It is, as Bosanquet points out, true that a particular thing may be looked at from two points of view. From the one, it may be regarded as only excluding other things from within itself. From the other, it may be regarded as a unity which contains diversity within it and maintains itself through the diversity of its internal contents. It is in this latter aspect

¹ *Individuality and Value*, p. 68.

that a particular thing is more appropriately called an individual. And the concrete universal is a name for each thing in this aspect in which it subordinates diversity of content to an abiding unity. But even here we cannot ignore the distinction between the universal and the particular. A particular thing may be regarded as an individual in the sense that it exhibits a unity in diversity. None the less, it remains a particular and does not become a universal in the accepted sense of being that which is common to many things. If, however, we choose here to follow Bradley and Bosanquet and say that the concrete universal is the individual and the individual is something which is complete and self-contained, we shall be left with only one individual, namely, the Absolute. This one individual being the only concrete universal, the logical problem of universals in the plural will cease to have any importance in philosophy. Of course, with Bradley and Bosanquet we may speak of different degrees of universals. But if by the universal we mean the individual which is complete and self-contained, there would be no reasonable ground for positing it anywhere except the Absolute or the world as a whole, for no thing or being in the world is really complete and self-contained. All things of the world, including our self, are so far from being self-contained that the existence of each depends more or less on the help and co-operation of all the rest. The logical problem of universals, therefore, is not solved by the idealist's flight to the Absolute; rather it is evaded by any such attempt. In discussing the logical problem of universals what we want to know is the nature of the universal as something which is common to all the particulars of a certain class or kind.

The theory of "concrete universals" has been explained in a different way by some other idealistic thinkers.

This we should now consider as being more in keeping with the logical problem of universals. This problem, as we have said, is concerned with the determination of the nature of the universal as something which is common to all the particulars of a class or kind. Professor R.F.A. Hoernle in his article on "Concerning Universals"¹ holds the view that 'the universal is a class-character which is common to, or identical in, many objects whose membership of the class is thereby determined', and that 'it is also a standard or norm which enables us to judge that a particular is good or bad of its kind'. We all know that a general name "applies in the same sense to many objects". The reason for this is that the many objects possess certain common qualities or characters in virtue of which they are treated as members of the same class.) It is because they have the same qualities that they become members of the same class and are denoted by the same general name. But by having the same qualities we cannot mean that the members of a class are "exactly similar" or identical with one another (and that they are distinguished only by their numerical difference,) like two newly-minted coins or the "identical twins" of popular parlance. So far as natural kinds or classes are concerned, we do not see that the members of a class are exactly similar and exhibit only numerical difference. (What we actually find is that the class-character in them receives different modifications) 'Individual specimens differ from each other, very largely, by differences which are, in fact, particular modifications of their species-and-genus characters'. These characters being usually called "universals" and the instances in which they are realised "particulars", Hoernle proposes to hold the view that 'a universal is realised "more or less" in its particulars'. There are two ways in which a universal

¹ *Vide, Mind*, 1927, pp. 179-204.

may be realised "more or less" in its particulars. Firstly, if the universal be a simple quality like a red or white colour, then it will be realised in the particulars in varying *degrees*. Thus two white things may be said to have the same universal, white colour, realised in them in different shades or degrees of brightness. Secondly, if the universal be a compound or complex of qualities more or less closely inter-related and mutually dependent, it is realised in its particulars in varying *modes*. Thus rationality as a universal is a complex of different kinds of activities and interests which constitute the "life of reason". And it is realised in different men in such varying modes as art, science, religion, philosophy, etc. Different men participate in the universal 'rationality', in different ways, some as artists, some as scientists, and so on. Thus we see that the universal does not stand for any identical quality or qualities in the particulars. If it were so, the particulars could not be distinguished from one another, except for their numerical difference. But then, their difference would be due, not to anything in their nature, but to something which is external to it, namely, the occupation of different positions in space. So we should not conceive the universal abstractly as standing for some self-identical quality of the particulars. On the other hand, we should take it to mean, concretely, an "identity in difference", a class-character which is realised in different degrees and modes in the particulars. In other words, the universal is the same class-character which is realised in the differences of its degrees and modes as exhibited in the members of the class. 'Rationality is a universal which is realised in its instances, not as a standing possession, but rather as a variable achievement. Universals are thus variable in the degree and mode of their realisation'. The universal is not only a class-character, but also a norm or

standard. We judge the particulars as good or bad of their kind according as they realise the universal in them in a greater or lesser degree and in a more or less comprehensive way. ✓

Professor Brand Blanshard has made an elaborate attempt to establish the theory of concrete ~~un~~iversals in a new form as against the old theory of abstract universals. According to him, the abstract universal is a fiction, although a very useful fiction. There is no such thing as abstract colouredness, or triangularity, or animality that remains identical through a variety of species and constitutes a species by the addition of further characters from without. The universal as an abstract of the identical qualities of a number of species or individuals, taken apart from their differences, neither exists in nature nor can be conceived by the mind. All universals, be they generic or qualitative, have being only in their differentiations. ✓ A generic universal is one which underlies a general class of things or individuals and may thus have different species under it. The relation of the generic universal to the species or the individuals is such that in isolation from them it can neither *be* nor be clearly conceived; its only way of being real is to find embodiment in them. 'The species are the forms that the genus must take in order to be at all. A qualitative universal is one that underlies a number of qualities or characters of the same kind. Thus while man is a generic universal in different races of men and different individual men, whiteness is a qualitative universal for different white colours. The qualitative universal also has being only in the different instances of it and cannot be conceived apart from relation to them. There is no whiteness apart from this or that white colour; nor can we conceive what whiteness as such and as unrelated to any particular white colour, is. But from this

we are not to suppose that the universal is only the totality of its embodiments and nothing more. The genus is not completely resolvable into the species or the individuals coming under it, nor is the qualitative universal 'whiteness', merely a name for the collection of all white colours. The genus is clearly distinguishable from the species and is, therefore, different from them. Hence we are to say that the universal is at once the same with and different from its particular embodiments. It is realised in the particulars and yet is more than and different from them. As Professor Blanshard puts it: "The universal is thus in its differentiations; it is *identical* with them; it is *distinct* from them."¹ This may sound paradoxical. But it is not really so. "The universal is related to its species or the individuals as potential to actual. It is the partial realisation of its more specific forms, and it exists only as the *thought* of these." It is the nature of thought to realise its object. The thought of the object is the object itself as partially realised, and the object is its thought fully realised. The universal is related to its specific forms in the same way. It is the thought of the specific forms in the sense that it is a potentiality of those forms or the forms themselves as partially realised. It is its very essence to realise those forms, and it is so far as it is realised in them. In this sense the universal is always ideal. It has an indeterminate being in the thought which seeks to realise itself in its varying embodiments. Just as thought must be the same with its object and also different from its object, so the universal is at once the same with and different from its specific forms.

These points with regard to the nature of the universal, so far explained, may be summed up as follows. The universal is not an abstract of any set of invariable quali-

¹ *The Nature of Thought*, V. I, p. 611.

ties shared by all the individuals of a class: Rather, it is the potentiality which developed to the full would *be* the various individuals. As a potentiality it exists only as the *thought* of these individuals and is, therefore, always ideal. It is only thought that can be potential. The fully real is never potential, and what is potential is, therefore, different from the real, i.e. is ideal. 'The universal as a potentiality does not exist in the real world independently of mind; its only being is in thought'. 'It exists only in idea; it is a potentiality partially realised, which, if realised fully, would *be* its alternative forms.'¹

It would appear from what has been stated above that the universal like man or colour is not an identical entity existing in the individuals like a little nucleus unaffected by the mode of its realisation. There is no abstract humanity that is quite identical in all men; there is no colour that is colour in general. "The generic universal lies not in the reality thought about, but in our thought about that reality."² Corresponding to the universal, we cannot point to an identical entity in objects or things. Rather, the universal is the thought which seeks to define and fulfil itself in its objects. ✓ It is natural to suppose that the objects in which the universal as thought finds fulfilment are the individuals. But this is wrong, for an individual is nothing but a synthesis of characters and relations which are themselves universals in the traditional sense. Taking any individual like a table or an orange what we find by analysis is a group of qualities and relations. We do not find any entity which underlies them and owns them as its qualities and relations. The table or the orange as an individual is a certain grouping of some characters and relations, like brown or yellow colour, hard or soft touch, etc.

¹ Cf. *Op. cit.*, pp. 620, 624.

² *Op. cit.*, p. 652.

These characters and relations are universals in the sense that they may be exemplified in other tables and oranges, and also in other things. ✓ Individuals are thus found to be wholly made of universals. It may be said here that although the characters of which individuals are made, are universals, yet their specific instances are particulars which cannot be reduced to universals. Thus *this* brown colour or *this* hard touch seems to be a unique and irreducible particular. But on closer view we find that the particulars are specific universals. *This* brown colour of this table may be repeated in other tables. The same note may be sounded twice over, and the same shade of red may mark two pencils. ✓ It would, therefore, seem that the universal is fulfilled, not in a range of individuals but in a range of specific universals. The specific universals, however, appear to be loosely aggregated in things and there seems to be no intelligible connection among them. Thus an orange appears to be a loose aggregate of a particular colour, taste, touch and smell, and we do not know why or how they are united in it. But thought cannot find its fulfilment in such loose aggregates. ✓ The ultimate end of thought is to apprehend the true and real as a coherent system within which all facts, including the particulars of sense, are intelligibly related. It can be satisfied neither with the individuals nor with the particulars so long as they are not linked intelligibly in a system which includes them. Thus 'the generic universal, triangle, can specify its meaning only in the alternative species of triangle. These species, as the thought develops, resolve themselves into subspecies, and these again into particulars which are properly speaking, specific universals. But thought cannot rest even with these; it must introduce a system among them, and then, if possible, a wider system'.¹ The same thing may be said with regard

¹ *Op. cit.*, p. 654.

to any other universal. Every universal as thought, would take us to the real as a coherent system of all things. The universal finds its final fulfilment in the system in which all things are internally related and intelligibly connected, and nothing in the universe is left outside the web of necessity. We seem to return here to Bosanquet's view that the concrete universal is the world as a system and that it is one with the Individual or the Absolute. ✓

It will appear from our account of the theory of concrete universals that the main pivot on which it turns is the principle of identity-in-difference. All the advocates of this theory agree in maintaining that identity has no meaning apart from difference and difference also has no meaning apart from identity. The identity of a thing means its sameness in and through different states and processes. On the other hand, we can speak of different states and processes or, for the matter of that, of difference and change in general, only if there is something which has these different states and processes, or changes through them and yet remains the same. Thus mere identity and mere difference are alike false and unreal. They neither exist in nature nor can be thought of by us. It is identity-in-difference that alone is real and conceivable. This principle of identity-in-difference is Hegelian in origin. It occupies the central position in the philosophy of Hegel and of many of his followers including Bradley, Bosanquet and others. It has been applied to all philosophical problems and determined the nature of their solutions. It is by the application of the same principle that the idealistic thinkers, mentioned here, formulate the theory of concrete universals. According to this theory, the universal is not the common character of a genus which remains identical in all its species and individuals, but is an identity which is realised in their differences. The identity has being only in its differentiations; it is an identi-

ty in differences.) Now let us try to make clear to ourselves what the principle of identity-in-difference really stands for. When we speak of an identity-in-difference, it is implied that identity is not difference, nor difference identity, and that the one is distinct from the other, although it be in the other. But this is possible only if the identity be something which is other than the differences in which it may be. Whenever we speak of an identity-in-difference, there must be something which remains identical with itself in the differences. It cannot be merely the unity or organised totality of differences, for the unity of differences cannot be said to be in differences. Further, we cannot understand how the differences can be unified except through their reference to a common centre, i.e. something identical in them. In the case of material objects, there seems to be no such identity-in-difference. A material object like a table is, of course, said to be something which is brown, hard and so forth. But when we search for this identical something to which the qualities of brownness, hardness, etc. belong, we seem to get nothing. A moving body may be said to be an identity-in-difference, in so far as it passes through different positions in space. But that is because we take the moving body as something which remains the same while occupying different positions which it might not have occupied. Taking any material body by itself we do not find anything which is identical in it and stands within it like a thin pin to which its differences get attached. It is perhaps in the life of the self that we experience an identity which appears to pass through different states and conditions and yet remains identical, in so far as it transcends them and is not really affected by them. Now if we apply the principle of identity-in-difference to the problem of universals, then we ought to expect something which is identical in many particulars or individuals. The particulars may and do

vary among themselves in various respects. But if they all belong to the same class, there must be the same universal in them. And the universal is that which remains identical in them and amid their differences. It must be something which is other than their differences and is indifferent to them. But although a universal of this sort seems to be required by us, the supporters of the theory of concrete universals condemn it as abstract, unreal and false. For them, the universal is an identity-in-difference, not in the sense of being something other than and indifferent to the differences, but as being the same with and realised in the differences. 'The universal', we are told by them, 'has being only in its differentiations', and 'it is realised more or less in its particulars'. The being of the universal is thus identical with the being of its differentiations and particulars. But the being of these, differs from instance to instance. Hence the universal as identical with them must be different in the different instances of it. It ceases to be an identity of differences and becomes, so to say, a differentiated identity, an identity broken by differences. Of course, we are also told that the universal is both identical with and distinct from its differentiations. But it is difficult to understand how this is so. Some idealists would say here that this is possible because the universal is always ideal and exists as the thought of its specific forms and differentiations. 'The universal', as Prof. Blanshard says, 'lies not in the reality thought about, but in our thought about that reality; it does not exist in the real world independently of mind; its only being is in thought'. If this be really so, we are to say that it ceases to be the universal we are in search of and becomes something different. The universal we want is the universal *in* a class of things or individuals. What, however, we get here is only a thought of those things in our mind. We are, therefore, to say

that the universal is a concept or a mental construct and that this concept is what is identical in many things or individuals. But then the universal would fall far short of the identity in the differences of the things of the world. It may here be said that the universal as thought is realised in things, for it is the very essence of thought to realise its object. But, on the idealist's own showing, thought finds its complete realisation not in classes of things, nor in the individuals or particulars of experience. It requires the complete system of things as a coherent whole for its full realisation. But on this view of the matter, there would be only one universal, and that is the Absolute. So even here the problem of universals as genuine identities in classes of things is left unsolved. The theory of concrete universals in its different forms is thus found to be unsatisfactory and unacceptable.

Now we pass to another theory of universals which seems to be common to J. Cook Wilson and G. F. Stout. This theory has a peculiar character in so far as it appears to be formally similar to the Hegelian theory of concrete universals, but is really a close approximation to the nominalistic theory. The latter theory holds that the only entities that can be called real are the particulars of experience, such as individual beings, particular things and their particular qualities or characters. While the particulars are real, the general or the universal is unreal and fictitious. Thus there is no such thing as a man in general which is not this or that individual man; there is no colour in general which is not any of the particular colours we can see. But the particulars resemble one another in certain respects and are, therefore, grouped into certain classes and called by some general names. Men, animals, chairs, tables, colours, etc. form different classes because they resemble one another in certain respects and differ from one another in

certain other respects. There is no common character or identical essence in all the individuals of a class. The only thing that they may be said to have in common is the general name which applies to a class and to every individual member of that class. The universal is just a name for a class of individuals and nothing more. If we think that the universal stands for any common essence or identical characters of all the particulars of a class, we are deluding ourselves into the belief in what is unreal and false. F. C. S. Schiller puts the nominalistic theory in a nutshell when he says that 'universals are nothing really but meanings embodied in words and conceived as *things*.'¹ The same word can be used again and again whenever the mind recognises a *similar* situation. This generates in us a belief that the word means some fixed and unchanging element or essence in the things to which it is equally applicable. "Men may come and men may go, but 'man' is predicated of them all. 'Man' therefore, is one and the same, in all cases and for all time. It is 'eternal' and 'universal'. It is one in the many, the unity which pervades and sustains them.'" "But to say that this is really so, is as absurd as to say that all the individuals who have the same name 'Smith' must have a common quality of 'Smithness' in them as their universal'.

In the light of the foregoing observations let us consider the theory of universals as formulated by Cook Wilson and Stout. According to Cook Wilson, 'the universal is not a mere thought of ours. It is something we ascribe to reality itself and suppose to be identical in particular realities'.² The universal is something which is identical in a number of particulars and is, therefore, distinguished from

¹ Schiller, *Logic for Use*, p. 68.

² *Ibid.*

³ Cook Wilson, *Statement and Inference*, V. I, p. 335.

the particulars. The universal thus understood takes of its own nature specific forms and is realised in its species; linearity is either rectilinearity or curvilinearity; colour is blue, red, green, etc. 'Now just as it is the very nature of the universal to be a unity which must take specific forms, so also it is its nature to be particularized. The universal is the universal of particulars, and its reality cannot be separated from them any more than its unity can be separated from its species.'¹ This brings out the fact that 'differentiation or different species of the genus, and individualization or the individuals, are nothing outside the nature of the universal and therefore do not require to be reconciled with it. The universal as genus is not something *in* the species with the differentia added to it as something from outside. Similarly, the individual or particular has not the universal *in* it and something *also* beside the universal to make it particular. As the whole nature of the species is covered by the genus-universal, so the whole nature of the particular is covered by the universal.'² In a particular colour like the red colour of this rose, there is nothing but colour; in a particular number like 'three' there is nothing but number. The nature of the individual or particular is nothing but what belongs to the universal itself. The universal is, by its very nature, realised in the particulars and it cannot *be*, except as particularized. This is why we cannot apprehend it except in the apprehension of a particular, either experienced or remembered. But proceeding further Cook Wilson tells us that 'the aggregate of the species belongs to the nature of the genus and might seem to constitute its full nature.'³ But the genus being something which is identical in each of them, we cannot

¹ *Ibid.*

² *Op. cit.*, V. I, pp. 335-36.

³ *Op. cit.*, V. II, p. 670.

say that the genus is identical with the aggregate of its species, for their aggregate cannot be something identical in each of them. Here a distinction is made between the identical nature and the full or complete nature of the universal. While the universal in its identical nature is not to be identified with any or all of its specific forms, its complete nature or being is constituted by the aggregate of its species'. 'The species', we are told, 'are parts of the whole being of the genus, but not parts or elements of its identical being,—that is, what it is in the species identically'.¹ But this means that the whole or total being of the universal is the aggregate of its species. To quote Cook Wilson's own words, "The total being of the universal is not its unity and identity in particulars, but the whole of the particulars as the particularization of this unity".² But if the universal, as he holds, cannot *be*, except as particularized, we are to say that the only real being that the universal can have is as the totality of its particulars. It is here that Cook Wilson's theory of the universal very closely approximates to nominalism.

Stout's theory of the universal is somewhat similar to that of Cook Wilson, but seems to have a greater leaning towards nominalism than the latter. According to him, the universal is a special type of unity among other types like the unity of the complex of qualities of a thing or an individual, the unity of space and time, and so on. It is "the unity of a class or kind as including its members or instances".³ The unity of a class or kind is quite ultimate. It cannot be derived from the possession of a common quality or relation by all the members of a class. ✓ It is usually supposed that the unity of a class is constituted by

¹ *Op. cit.*, V. II, p. 675.

² *Op. cit.*, V. I, p. 338.

³ Stout, *Studies in Philosophy and Psychology*, p. 384.

the identity of some character, quality or relation, characterising all the members of the class. But all the characters of a thing or of an individual are as particular as the thing or individual which they characterise. Of two round red billiard balls, each has its own particular roundness and redness, separate and distinct from those of the other, just as the billiard balls themselves are distinct and separate. When we say that all billiard balls are round, what we mean is not that there is the same roundness in them all, but that each of them has a character, here roundness, which is a particular instance of this class of characters. Similarly, all roses may be said to be red in the sense that the redness of each is a particular instance of the class of red colours. Abstract names are not singular but general terms. An abstract noun does not stand for a single and indivisible quality or relation, but for a class of qualities or relations. Shape stands for all shapes as such, and roundness stands for all round shapes as such. But the shape of a particular thing is a singular term denoting a quality which is as particular as the thing itself.

So far Stout's position, that characters are as particular as the concrete things or individuals which they characterise and that the universal is a name for a class of particulars, seems to be purely nominalistic. But it is distinguished from nominalism on the ground that while the nominalists explain the unity of a class through the relation of resemblance among its members, Stout looks upon the distributive unity of a class or kind as an ultimate and unanalysable type of unity. He says: "Agreeing with the nominalist that characters are as particular as the things or substances they characterise, the inference I draw from this thesis is not that there really are no universals, but that the universal is a distributive unity."¹ The

¹ *Op. cit.*, p. 388.

distributive unity of a class cannot be explained by any sort of resemblance among its members. The nominalists are wrong when they hold that a number of individuals form a class because they resemble one another. On Stout's view of the matter, they are said to resemble one another because they are regarded as belonging to the same class. The unity of the class is presupposed by the relation of resemblance among its members and so cannot be explained by it. This is what Stout tries to make out in his criticism of the nominalist position. First, it is pointed out that distributive unity is signified by such words as "all", "every", "any", "some", and the indefinite article. But the meaning of these words cannot be stated adequately in terms of resemblance. Thus "all triangles" may be said to mean *all* shapes which resemble each other in a certain respect. But such statements presuppose that the word "all" has a meaning of its own which cannot be reduced to relations of similarity. It is precisely the concept of distributive unity, signified by the word "all", which is left unexplained. Secondly, what do the nominalists mean by 'resemblance in a certain respect'? They cannot mean any single and indivisible quality or relation which is identical in all the things that resemble one another. For as nominalists they deny the existence of such identical characters in things. To say that things resemble one another in a certain respect when they belong to the same class is to beg the question, for it is just this concept of 'class' or 'kind' that is sought to be explained by resemblance among its members. Thirdly, every relation presupposes a complex unity within which the relation and its terms fall. This complex unity is the *fundamentum relationis*. For example, if one thing be related to another by the relation of 'being upon' it, there must be a spatial complex or whole including both the things and their rela-

tion. In a similar way, the relation of resemblance presupposes a complex unity within which the terms and the relation itself fall. This complex unity is the distributive unity of a class. And since it is the *fundamentum relationis* presupposed in the apprehension of resemblance, we cannot explain it in terms of or on the basis of resemblance itself. The distributive unity of a class, then, is an ultimate and unanalysable type of unity, and the universal is this distributive unity.

It will be observed here that what is most distinctive in Stout's position is his concept of distributive unity. But if we closely examine this concept, we shall see that it fails to give us a satisfactory theory of the universal. He treats it as quite an ultimate and unanalysable type of unity. It is not grounded on the similarity or resemblance among the members of a class, but is itself the ground of their similarity to one another. This, however, does not seem to be true as a matter of fact. We have no notion of a class of objects unless and until we detect a certain resemblance or similarity among a number of different things or individuals. The classification of the objects of the world proceeds in the light of our observation of the points of similarity or dissimilarity among them. Hence we are to say that the distributive unity of a class is not an ultimate and unanalysable type of unity, but one that can be explained by the possession of common characters by its members. Of course, Stout would deny this and say that there are no common characters in things and that their similarity or resemblance is due to their being members of the same class. According to him, there are two senses of the term 'similarity' (or 'resemblance'), a narrower and a wider.¹ In the narrower sense similarity means that agreement be-

¹ I owe this information to Norman Kemp Smith, 'The Nature of Universals' in *Mind*, 1927, p. 397.

tween two or more things or characters which can be detected by direct observation and comparison of them. Thus two or more men may be found on observation and comparison to agree in certain respects. In a like manner, two or more colours may be compared by us and found to be similar. The similarity thus discovered is the basis of our bringing the things or characters under the same class. It is in this way that men can be classed as white, black or yellow, and colours can be classed as red or green. In the wider sense similarity means that agreement among things or characters which is discovered indirectly when we know them to belong to the same class. This happens when a non-distributive type of unity is the basis of a class, e.g. the class 'parts of this chair'. The parts of a chair, e.g. its legs, arms, seat, etc., are or may be of the most diverse characters. Yet they are declared to be similar in so far as they agree in being parts of the same chair. Here our knowledge of the class is not based on any prior knowledge of similarity of the parts in certain respects, because there is no such similarity. Rather, their similarity depends on their belonging to the same class. Now Stout holds that similarity in the wider sense is more fundamental than similarity in the narrower sense and that the latter is reducible to the former. Thus two colours can be known as similar only so far as *each* is recognised as being a colour, i.e. as belonging to the class of colours. But on closer scrutiny it will be found that similarity in the wider sense is not only not fundamental but reducible to similarity in the narrower sense, and that it does not properly explain the idea of similarity itself. When the parts of a chair are said to be similar because they all belong to it as its parts, it is evident that they exercise a common function, namely, contributing to the same chair. So we are to say that they have a common functional character. Thus similarity in the

wider sense may be reduced to similarity in the narrower sense. On the other hand, there is an essential difference between the two senses which makes it difficult for us to reduce the first and narrower sense to the second and wider sense. Similarity in the narrower sense is open to direct inspection and does not require anything more than a comparison of two or more things or characters by themselves. As such, it cannot be reduced to similarity in the second and wider sense where the separate things or characters are not compared, but only their common relation to a whole is considered. In truth, however, similarity in the wider sense is not similarity proper. That two things are parts of the same whole is no reason for our saying that there is a similarity between them. A door and a brick may be parts of the same house and thus belong to this class 'parts of a house'. But that will not justify us in thinking that they are similar in the strict sense of the term. Similarity proper is always an agreement between two or more things in respect of a certain character. All colours are similar in so far as they possess the common character of defining outline in visual space. It is by reason of this common character that they form the class of colours and are excluded from the class of sounds or smells. In view of all these facts we are led to the conclusion that the distributive unity of a class is not as ultimate as Stout supposes it to be, and that it can be accounted for by the presence of common characters in the members of class. So it seems that by the universal we should not mean the unity of a class, but the common characters of the individuals or particulars forming a class. Stout also admits that 'if this unity is not taken as ultimate, we are to mean by the universal whatever principle is supposed to account for it'.¹ We have so far stated

¹ *Studies in Philosophy and Psychology*, p. 384.

the reasons why it should not be taken as ultimate and indicated the principle that can account for it.

The position that we have now reached may be summarised as follows. The universal is not an eternal and unchanging entity which exists or subsists in its own right in a separate world independently of the particulars of experience, but may enter into and qualify them at different times and places. It is not a concrete identity-in-difference of the Hegelian type, which is ultimately indistinguishable from the self-identity of an individual object or the whole system of objects as the Individual or the Absolute. Again, the universal is not correctly defined in the manner of Cook Wilson as "the whole of the particulars as the particularisation of its unity," or that of Stout as "the unity of a class as including its members or instances". Rather, it seems that the universal stands for some common character or characters of the individuals of a class. This view is known as *the theory of abstract universals* and it is the orthodox or traditional view with regard to the nature of universals. It has been partially explained in connection with our account of the theory of concrete universals. It will appear from what we have stated by way of contrast, that according to this theory the universal is the identical character or characters of all the individuals of a class taken apart from their varying and peculiar characters. While the individuals are different and separate from one another, there are certain qualities and relations, i.e. characters which recur in them in exactly the same way. We form an idea of the universal when we separate these recurrent characters of the individuals from all others in which they differ. The idea of the universal is formed by abstraction from the varying characters of the individuals, and the universal thus reached is accordingly called abstract. The advocates of the theory of

concrete universals refer to the abstract universal in the most disparaging terms and equate it with the unreal and the false. They seem to give us an impression that anything that is abstract is false, whereas everything that is concrete is true and real. But here they forget that the universal must necessarily be abstract and that the name "concrete universal" is not only meaningless but, as Cook Wilson points out, "a veritable contradiction in terms".¹ The concrete as opposed to the abstract should mean a particular existent. A concrete thing is what we can see, touch and handle. If this be so, there is no sense in speaking of the universal as concrete, for that would reduce it to the position of a particular existent. The universal being that which is identical in many particulars cannot itself be a particular. It cannot afford to be more than some general character or nature of the particulars and itself become concrete like a particular. Every individual is found on analysis to be a particular of some kind. It is a *this* which is *such-and-such*, or a *that* qualified by a *what*. The *this* stands for the particular existence of the individual and the *such-and-such* for what kind of existence it is. Now the universal is signified by the *what* or *such-and-such* of a thing. As such, it must be different from a particular existence. While one thing cannot be another, there may be many things which are *such-and-such*. If, then, the universal is to be at all universal, it must be abstract and not concrete like a particular existence. These considerations will also help us to meet the charge of unreality brought by the advocates of concrete universals against the abstract universal. They seem to think that the universal as an abstract of the common quali-

¹ *Statement and Inference*, V. II, p. 714. Cf. R. M. Eaton, *General Logic*, p. 272: "The rejection of the abstract universal is a renunciation of clarity in logic; a renunciation of logic itself."

ties of individuals, taken apart from their differences, is nowhere to be found in nature and can nowise be conceived. But if by the universal we mean that which is identical in many particulars, we do not see how the universal can be, unless it be regarded as something other than their differences. If the differences enter into the universal itself, then it would cease to be a universal and become as particular and exclusive as the differences themselves. Hence somehow or other we are to take the universal apart from the differences of the things of which it is acknowledged to be the universal. Of course, we cannot take it apart in such a way as to separate it locally from the differences. But that is not only unnecessary but inadmissible for a theory of the abstract universal. The universal being the common characters of the individuals themselves can as little be separated locally from them as from their different specific characters. But, then, we must be able to take them apart conceptually, if we are to preserve the distinctive nature of the universal. If the universal cannot be distinguished from the differences of things, even in thought, it would not be a universal at all. Hence we must, at least in thought, keep the universal distinct from the differences of its particulars. It is in this sense that the universal as the common characters of many individuals must be taken apart from their differences. Thus the ordinary objections against the theory of abstract universals do not seem to present any serious difficulty to it.

But the theory of abstract universals seems to be involved in a real difficulty in explaining the presence of common characters in different particulars. Thus of two or more red balls it might be said that while the balls are spatially separate and therefore particular, the red in the one is identical with the red in the others. But if the balls themselves are to be regarded as numerically distinct be-

cause they are spatially separate, there seems to be no reason why the red in them should not be so regarded. Similar is the case with relations. The relation 'to the right of' holds between different things, at different times and in different places. As such, the relation seems to be different in the different cases. It would thus appear that all characters, qualities and relations, are as particular as the things they characterise. If this be really so, there would be no ground for our believing in the theory of abstract universals, namely that the universal is constituted by the common or identical characters of the particulars of a class. On the other hand, things and all their characters being particular, it would seem that the universal is only a name for the class of particulars.

In view of such difficulties which lie in the way of the traditional theory on the one hand and Stout's theory on the other, Professor Kemp Smith¹ formulates a theory of the universal which seems to occupy an intermediate position between the two. While agreeing with Cook Wilson and Stout, that qualities and relations are, as existences, always particular, he differs from them in holding that the unity of the universal is not merely the distributive unity of a class, but the genuine identity of a type. In every character or quality and in every relation he makes a distinction between their existence as particulars and the type of which they are particulars. 'Corresponding to *every* character and to *every* relation there is a kind or type of which the character or relation is an instance.' Every character or relation is to be apprehended only as a 'so-and-so,' as a 'such'. This means that every character or relation is of a certain kind or pattern, i.e. is an instance of a type. It is the type or kind that can be repeated in different instances. While the different instances are parti-

¹ Cf. his three articles on "The Nature of Universals," *Mind*, 1927.

culars which exclude one another, the type or kind is what is recurrent in them. The universal is thus 'name for the kind or type, and not for the class or totality of the instances.' The distinction between a character and a type may be explained thus: Suppose we symbolise particular instances of the same shade of red by A_1, A_2, A_3 , etc. What we directly apprehend when we look at any one of these is a particular character. But this character is also apprehended as being a 'so-and-so', i.e. of a type; and the type is identical in all the particulars of that kind. The type is thus symbolised by A . "The type or universal, A , as such, is a predicate, not a character; but A_1, A_2, A_3 , etc., being what they are, it is truly predicable of them. Hence when we say, 'This flower is red', what we are asserting is, 'This flower has a character which is of the type 'being red'.'" ¹ The distinction between a character and a type is further explained by Professor Kemp Smith by pointing out that the latter involves consideration of other instances than the character, or the thing or event which has the character. A character may be apprehended by itself, but a type requires for its apprehension reference to a complex situation in which there is more than one instance of the character, and in which the instances are severally identified as of the same 'so-and-so'. "The difference between 'being a character' and 'being a type' may, therefore, be taken as the difference between a mode of existence and that mode of existence as reflected upon." ²

Now we are to observe that Professor Kemp Smith's theory of the universal does not seem to take us far beyond the traditional view of it as constituted by the common characters of the particulars of a class. Of course, he treats all characters as particular and, therefore, as unique

¹ *Ibid.*, pp. 413-14.

² *Ibid.*

and non-recurrent. 'What is recurrent in them is exclusively a type, kind or pattern'. Therefore, the type of the characters is regarded by him as the true universal in them. But to say that the universal is the type or kind of the particulars is not so much to explain its nature as to give it a different name with the same meaning. It is to say practically the same thing in different words. For, by the type or kind we generally mean that which is common to or identical in all the things of a certain class. And by the universal also we mean the same thing. Hence to say that the universal is the type of the characters which, as existences, are particular, is not to explain its nature properly. The real question with regard to the nature of the universal is: What is it that makes a number of particulars to be things of the same kind or type and so different from things of another kind or type? As we have already said, the particulars of experience are treated by us as being of the same or of a different kind because they agree with or differ from one another in certain respects. If a number of particular things are brought under the same class it must be because they possess certain common characters. Similarly, they are distinguished from things of a different class by virtue of the fact that the characters common to them are absent in the things of the other class. It would thus appear that underlying the notion of a class, kind or type of the particulars there must be the presence of common characters in them. Professor Kemp Smith has to admit this when he says that every character, although particular as an existence, is to be apprehended as a 'so-and-so', as a 'such', and that the characters 'being what they are', the type is truly predicable of them. Now the 'so-and-so', or the 'such' either does or does not indicate some qualitative nature of the particular characters. If it does not, then there would be nothing that could embody or exemplify the

type, and the type would not be predicable of them. On the other hand, if the 'such' does stand for some qualitative nature of the particular characters, the type would indeed be predicable of them, but, at the same time, would be indistinguishable from that nature. The type is predicable of the characters in so far as they are *what* they are, i.e. possess a common qualitative nature. The type thus really stands for a common nature or character of the particulars. In the case of absolutely specific types like the same shade of red, symbolised by A, Professor Smith himself admits that the whole nature of the particular, say A₁ or A₂, is determined by the type and that each instance is apprehensible only as a 'such', and *the 'such' is the type*. If, therefore, the 'such' does, as it must, indicate a qualitative nature of the instances, we are to say that the universal as the type of the particulars is just their common nature or identical character.

It would appear from the foregoing discussion that the nature of universals presents one of those knotty problems of philosophy to which no simple answer can be given. So far we have not been able to accept wholly any of the theories that have been advocated by distinguished philosophers, ancient or modern. It will, however, be observed by one who follows the trend of the previous discussion that we are more or less in sympathy with the traditional theory of abstract universals, according to which the universal stands for the common character or characters of all the particulars or individuals of a class. We have tried to meet some of the difficulties which lie in the way of this theory. But one main difficulty in the theory is said to be connected with its assumption of the presence of common or identical characters in many different particulars. As both Stout and Cook Wilson have strongly urged, all the characters of things are as particular as the things which they charac-

terise. If this be really so, we cannot speak of any character, or characters as being common or identical in many particular things. As we shall, however, presently see, the main difficulty in the theory of abstract universals is due, not so much to this idea of common characters in different things, as to the idea that in *all* cases the universal is constituted by such common characters. We have already seen that those who treat all characters as particular cannot but admit some sort of similarity or common nature in the things which are brought under the same universal. This common nature, however, may not always be constituted by their common characters, i.e. qualities and relations. It seems to us that while in some cases the universal stands for the identity of characters, in others it may stand for the identity of essence, structure or function. What we mean to say is that the universal does not mean the same sort of identity in all cases in which we speak of the universal. Generally speaking, we may distinguish four different meanings of the universal. The universal may mean (1) the identity of essence or substance, (2) the identity of characters or qualities and relations, (3) the identity of form or structure, and (4) the identity of function in objects which are different but belong to the same class. Of course, we do not imply that these different meanings of the universal are exclusive and that where the one is, the others cannot be. On the other hand, we admit that the universal underlying a class of objects may be understood in one or more of these senses. That is, the universal may in some cases mean one sort of identity in a class of things or objects along with any other sort or sorts of identity that may be found present in them. It is from our experience of objects that we are to learn what sort or sorts of identity are meant by the universal in them. Let us explain and illustrate these points.

In the first place, the universal may mean the identity of essence or substance in objects that are different but are of the same kind. Of the universal in this sense, the most striking instances are supplied by material nouns. Words like *iron*, *water*, *rice*, *coal*, etc., represent universals which stand for the essential or substantial identity of separate and distinct objects. The different pieces of iron which exist in the world all agree in being made of the same material substance, namely, iron. So also the different clods of coal have the same substance, coal, in them. The different grains of rice may differ as to their colour, shape, weight, etc. But there is the same material substance, rice, in them. It is the substantial identity of objects which are otherwise different that constitutes, in these cases, the universal in them. We may refer to it by abstract names like iron-ness or water-ness. But what we primarily mean is not any identical quality or character of the many things denoted, but the identity of the matter or substance in them. Of course, a universal like iron-ness or water-ness may also be taken to mean the general properties of different pieces of iron or of water. But that is really a secondary sense of it which follows from its primary sense, since the identity of substance implies the identity of properties. What is true of material nouns is found to be true of some common nouns as well. By the word *cloth* we mean each one of the class of cloths. Corresponding to this general name there is a universal which is common to all cloths. But this universal cannot be said to be primarily constituted by the common characters of all cloths. Cloths differ from one another in respect of their colour, length, weight, etc. But they all agree in being made of the same material, namely, threads, and in having the same form or structure. Thus the universal here stands primarily for the identity of substance and structure. What common properties cloths

may have are derived from their substantial and structural identity. The universal represented by the word *cloth* thus means primarily the identity of substance and form, and secondarily that of characters, if there are any.

Secondly, the universal means primarily, in some cases, the identity of characters in objects that are different but are regarded as belonging to the same class. The characters which constitute the universal in these cases may be qualities or relations, and may thus be distinguished into qualitative and relational characters. Manhood as the universal in all men stands primarily for the essential human qualities, namely, animality and rationality. Similarly, colour or colouredness as the universal for the different kinds of colour such as red, white, green, etc., means their common quality of defining outline in visual space. Redness is the universal in all red colours. One red colour may differ from others in shade, brightness and so forth. As such, they may be said to be numerically distinct and different. But the quality of red *as such* is common to them all. Different shades of red agree in 'being red'. The quality of red *as such* may be defined as the capacity to show up outline in visual space as against both orange and purple. Justice as a universal means a certain moral quality which is common to all just acts which in themselves may differ in many respects. In some other cases the universal means the identity of relation among objects that are different in themselves. Fatherhood as a universal means the identity of the relation between any father and his children. The relation of 'being father of' is what is common to all fathers as related to their children, although it may hold between different persons. Likewise, the relation 'to the right of', or 'to the north of' may hold between very different objects at different times and in different places. The difference of the

terms and of the times and places seems to impart a corresponding difference to the relation itself. But the truth of the matter is that while the terms and their spatial and temporal conditions may change, the form of the relation does not seem to change. Different persons may stand to the right of other different persons. While the different cases of the relation 'to the right of' may be numerically distinguished by reference to their different terms, the form of the relation cannot be so distinguished. The relation 'being to the right of' is as much true of the one case as of all the rest. Hence we are to admit the identity of characters, i.e. qualities and relations, in objects that are otherwise different. And in some cases at least, we mean by the universal such identity of characters.

Thirdly, the universal may mean the identity of form or structure in objects which are different in respect of their substance or characters or both. The word *house* as a general term is applicable to each one of the class of houses. It thus represents the universal for all houses. But this universal cannot be said to mean any identity of the substance or material of which all houses are made. Houses may be made of mud, wood or bricks. Nor can the universal be taken to mean any character or characters which are common to all houses, for there seem to be no such characters, i.e. qualities and relations. What, however, is common to all houses is a certain form or structure. It is the structure that is identical in all houses which may differ as to their material and their characters.) But connected with the identity of structure there may be an identity of function. All houses may be said to have the same structure and to perform the same function, namely, affording shelter to human beings against rain, wind and the sun. The connection of structural identity with the functional in the meaning of the universal is seen more clearly in the case

of the universal represented by the word *bridge*. The universal common to all bridges is not any identity of material or of characters, but that of structure. All bridges agree in having a certain structure, although they may differ as to their material, and their qualitative and relational characters. Along with the identity of structure, we find an identity of function in all bridges in so far as they enable us to walk over regions of space which do not support heavy bodies like those of ours. We need not multiply instances to show how in some cases the universal stands for an identity of form, pattern or structure in objects which are otherwise different.

Lastly, the universal may in some cases mean only an identity of function in objects that are otherwise different. Take, for example, the word *medicine*. This word denotes all sorts of drugs which are different from one another in respect of their substance, qualities, relations, and structure, if there be any. So we cannot say that the universal represented by the word *medicine* stands for any identity of substance, character or structure in all the objects which come under it. All the objects, however, to which the name of medicine applies, agree in having the same function of curing diseases. Here, therefore, the universal means the functional identity of all the objects included in the class of medicines.) Similarly, the universals represented by the words *tool*, *machine*, *professor* do not stand for any identity of the material or character to be found in each one of the classes of objects respectively denoted by them. Tools differ as to their material, character and structure, but agree in performing the same function, namely, enabling the hands to apply force. Machines may differ in respect of their material and characters. But they generally agree in having a certain structure and in performing the same function. The universal for all machines may thus be said to

consist in their functional and structural identity. So also what is common to all professors is not any essence, attribute or structure, but the function of teaching students. In such and other similar cases, therefore, what we mean by the universal is only the functional identity of a class of things or objects, which may sometimes be connected with their structural identity.

To sum up the results of our enquiry into the nature of universals: To the question, what sort of entity is the universal? we cannot give any simple and single answer. The universal is not any eternal and unchanging essence of the nature of Platonic "ideas", for of such essence we have no evidence and we cannot properly explain its relation to the particulars of experience. All that we can say in favour of such a view of the universal is that in some cases the universal seems to stand for an identical essence or substance of which all the things of a class are made. This is the first meaning of the universal as explained by us. The Hegelian idea of the universal as an identity-in-difference is found to be unsatisfactory, first because the category of identity-in-difference is indefensible and inapplicable in many cases, and secondly because it is used to explain, not so much the nature of the universal as that of the individual. Nor can the universal be said to stand for the unity or totality of all the particulars of a class, as both Stout and Cook Wilson seem to hold. A number of particulars are grouped into one class in view of their similarity or agreement in certain respects. Hence it seems that the unity of a class is derived from the presence of common characters in all the members of that class. This fact naturally leads to the theory that the universal stands for the common characters of the individuals of a class. This view, we have found, is true in some but not in all cases in which we believe in the universal. On our view

of the matter, the sort of entity we mean by the universal seems to be different in different cases, although in every case we mean some sort of identity in the different things or objects which come under a universal. There are, broadly speaking, four sorts of identity, one or more of which we may mean when we speak of the universal. These are the identities of essence or substance, of characters or qualities and relations, of form or structure, and of function. In some cases the universal stands for the substantial or essential identity of a class of things, in some it stands for the identity of one or more characters of a class of objects, in other cases it stands for the structural identity of a class of things, and in still others the universal means only the functional identity of the class of objects which come under it. These different sorts of identity which we may mean by the universal in different cases are by no means exclusive of one another. On the other hand, we have reasons to believe that in many cases one sort of identity may be naturally connected with any other sort or sorts. It is from our experience of the objects of the world that we are to learn what sort of identity is meant by the universal in a particular case and whether it is connected with any other sorts. Many of the difficulties in which the other theories of the universal are involved seem to be due to the assumption that the universal stands for the same sort of entity in all possible cases. The theory of the universal we have outlined here rejects this assumption and rests on the recognition of its manifold nature, for which there seem to be good reasons.

THOUGHT AND REALITY

Thought and reality as ordinarily understood seem to be very different from and yet closely related to each other. When I think of what is generally regarded as a real thing like a table or a tree, the thing appears to be different from my thought of it. The thought is in my mind or rather, is an activity of my mind, but the thing is a real entity which is outside and apparently independent of my mind. Thus my thought and the real thing I think of, are different. Still, they are intimately related to each other. (Thought always refers to some real thing as its object.) There can hardly be any thought which is not related to something as its object. Of course, the object of thought need not always be a physical thing like a table or a tree. It can very well be something mental or even an entity which is neither physical nor mental. (But thought always requires some object which is, or at least, is taken to be, real.) Unless there are such real objects to which it is related, thought degenerates into imagination and reverie. Although we may sometimes speak of imaginary or visionary thought, yet imagination and day-dream do not bring out the essential nature of thought; they are not typical of it. In them thought is at a low ebb and free play is given to the association of ideas and images without the direction of thought. It is in reflective thinking that the real nature of thought comes out best. (When we reflect, we seek to answer some question with regard to some real thing.) Reflective thinking or thinking proper is not a mere play of ideas. It is an

intellectual attempt to answer genuine questions with regard to a world of things. Thought does not exist in itself as something within our minds ; it is its very nature to refer to real things and its main purpose is to understand the *how* and *why* of things. To think seriously about anything is to try to understand what the real nature of the thing is, and how and why it comes to be what it is. The end or aim of thought is the attainment of truth about things. We know the truth about a thing when we understand what it really is. (Thus thought may be defined as the intellectual activity which is directed to the knowledge of reality. Reality is the ultimate object or end of thought, and thought is the mental activity which seeks to know reality. Reality is different from thought, and yet it is the object or goal of thought.)

Thought being essentially an intellectual activity which aims at the knowledge of reality, takes the form of judgment at all the stages of its development. Judgment may be said to be the simplest as well as the universal form of thought. Thought begins with judgment and progresses towards a more and more consistent and comprehensive system of judgments. Judgment is the mental act of asserting that a thing is or is not so-and-so. It is the affirmation or denial of something with regard to something. Nothing simpler than this can be described as judgment. Thus there would be no judgment if we have a mere sensation of colour or sound without any assertion of it as the colour or sound of something or even *as* a colour or sound. To judge is to consider a thing to be such-and-such, or to characterise it in some way. Thus in place of mere sensations of colour or sound, we have judgments when we assert that 'it is the colour of a rose', or that 'it is the sound of a bell'. We have judgments even when we do not go so far, but merely assert that 'it is a

colour', or 'it is a sound'. Here there is an act of affirmation and characterisation of a given sense-datum *as* colour or sound. But short of this, we will have neither judgment nor thought. To think about anything is, as we have already said, to try to know the truth about it. But there can be no question of our knowing the truth about it unless we make some assertion about it. It is only when we assert that the thing is or is not such-and-such, i.e. make judgments, that we can claim to know the truth about it, although we may not really know it. So thought as an attempt to know a thing involves, even in its simplest form, some judgment about it. If there is no judgment, there is no thought proper, for then we say nothing which may be true or false. When we think that 'snow is white', we have a judgment which may be true or false, but 'snow' by itself or 'white' by itself is neither true nor false. Of course, the judgment 'this is snow', or 'this is white', may be true or false. But snow or white as a mere fact, not judged in any way, cannot be said to be true or false. When I judge a fact to be snow or to be white, my judgment may or may not give me the truth about it. Thus thought begins with judgment and what is simpler than judgment falls outside the sphere of thought.

But when thought begins as judgment it makes a distinction in the object between its existence and its character and it relates the one to other. To think about anything is to judge it to be such-and-such. The thing as an existent is thus considered to have a certain nature or character. It is taken as the 'that' qualified by the 'what'. When we think of a rose as red, we make a distinction between the rose as an existent entity and red as a colour, and we relate the latter to the former as its quality. In what is an undivided whole, thought makes a division between different elements and then puts them together as parts of the same

whole or same object. Thought in all its forms involves the processes of differentiation and integration of elements as parts of the whole or of one system.

Perception is the most elementary form of thought. Thought begins with judgment, and of judgment perception is the simplest form. It is in perception that we first know something as such-and-such. Perception is the immediate cognition of an object on the basis of some sensation. The mere sensation is different from perception. In sensation there is no judgment in so far as here we do not assert anything. In perception we assert the existence of some object as given in sensation. The object of perception may be a thing or a substance, a quality or an action. There is in perception a determination of the object as an existent thing, or quality or action. With such perceptions the work of thought as an attempt to know the real world begins. Our perceptions generally take the form of predicative judgments about individuals. In perception there is the interpretation of certain sensations as the qualities or characters of some particular existent entity. The existent entity is taken as the subject of which the qualities are the predicates. Thus in such perceptual judgments as 'the rose is red', 'the table is brown', etc., we predicate the qualities of red and brown with regard to the rose and the table as their respective subjects. In these and other judgments different elements are distinguished and related as parts of one whole. It is within one whole that the subject and the predicate are distinguished and related. The subject and the predicate are related elements of one concrete thing. When we perceive a colour or sound, we take it as the colour or sound of some individual thing existing in space and time. Further, some of our perceptions take the form of relational judgments. We say that 'this thing is near or far off from that

thing', 'this is earlier or later than that', and so on. In such perceptions we know individual objects to be in space and time and also to be spatially and temporally related to one another. Thus perception as the most elementary form of thought gives us the knowledge of individual objects as things with qualities and as related in space and time.

But thought cannot rest content with the fragmentary world of sense-perception. Within the narrow limits of the world of sense it finds itself baffled in its attempt to know the world of real things. Perception gives us a knowledge of the present existence of a thing. It tells us what the thing is at the present time and place, but not what it really is for all times and places. It cannot by itself enlighten us about the past and the future of the world of things. Nor, again, does it give any knowledge about the fixed and universal relations among the objects of the world. Generally speaking, perception does not enable thought to attain its goal, namely a systematic knowledge of the real world as a whole. Thought is, therefore, impelled to take other forms and make use of other judgments than those of perception. Of these conception and inference or reasoning in general are the most important. Concepts are formed by putting together the results of our past and present judgments with the possibility of their extension to the future. Our knowledge of the past comes from memory. In memory we apprehend the past through the impressions left by previous experiences as these are revived in the form of images. Just as in perception we know present objects through the interpretation of sensations, so in memory we know past objects through the interpretation of the impressions of previous experiences revived as images. In the light of a number of perceptual and memory judgments about a number of things, thought arrives at an understanding of their common or

general nature. A concept is just the form in which our thought understands the common or general nature of things. It is a general meaning or idea which is usually embodied in a general term. Unlike the percept, the concept is not limited to a particular object of sense. It applies to all the particulars of a certain kind or class. The development of concepts marks a distinct advance in the course of thought. While thought in the form of perception is concerned with the momentary phases of things taken as so many particulars, as working through concepts it arranges things into kinds and classes, and makes judgments which bear on their common and essential nature and are, therefore, expected to be universally true of them. Thus conceptual thought gets over the limitations of perceptual thinking and forms universal judgments about things. Perception helps one to apprehend the death of this or that individual man, but conceptual thought understands the mortality of all men by relating the concepts of man and mortality. The understanding of the common nature of things or of the universals in them as distinguished from the particulars of sense-perception, and the formation of universal judgments are the main contributions of conceptual thought to our knowledge of the world of real things.

Thought takes the form of reasoning or inference when it combines and connects separate judgments to arrive at new ones. Inference is more complex and integrated than separate judgments. In a judgment of perception or of memory we have the apprehension of some present or past object. In these judgments there seem to be no parts or moments, from one of which the mind passes to the others. They represent a single act of the mind in the apprehension of a single object which may contain different parts or elements in it as the subject and the predicate. But from

such judgments we come to inference or reasoning when thought passes from certain judgments to others different from them but somehow grounded in them. To while in simple judgments separate facts are asserted, in inference the necessary connections among different facts are exhibited. To show the necessary connections of facts thought uses general ideas and concepts, and discovers the general laws and principles governing them. Here thought does not rest content with the statements about separate facts or separate judgments, but tries to connect or cor-relate them according to certain general principles. In this way it progresses towards a system of knowledge in which different facts and different judgments are inter-related as parts of one ordered whole. It does not take facts as simply given in perception or memory, but tries to show how they necessarily follow from other facts according to the general principles governing the system to which they belong. We have a system when many different things or objects are so related as parts of one whole that each has a necessary relation to the whole and to all the other parts. Hence in a system of things the knowledge of the whole leads to a knowledge of the parts and the knowledge of a part leads to that of the whole. The ideal of thought as the attempt to know reality is the construction of such a system of knowledge in which everything is intelligibly related to everything else and to the system as a whole.

In the attempt to know reality thought passes from the ordinary common-sense view of things to the sciences and from these to the different philosophical systems. The ordinary view of the world as an aggregate of many reals that are externally related to one another in space and time, fails to satisfy the demand of thought for a consistent and comprehensive system of knowledge. As we shall

see presently, it does not give us a knowledge of the reality of things or of the real world as a whole. The different physical, mental and moral sciences are partial systems of knowledge in the sense that each of them is a systematised knowledge of the particular group of facts with which it deals. In each of them we have an organised body of knowledge which includes and cor-relates all the particular experiences and judgments relating to its own subject-matter. But these special sciences being limited each to its own special field or sphere of facts are partial systems which cannot comprehend the entire world of facts or the whole world of reality. It is in philosophy that thought rises from the partial systems of knowledge in the special sciences to a universal and complete system in which all the partial systems and their truths are unified as parts of one systematic whole. The ideal of thought is such a completely organised knowledge of all facts as parts of one harmonious system. So long as thought does not reach this goal, it cannot cease, but has to press forward. The ideal is always held up before it and guides its activities. The history of philosophy is a record of the repeated attempts made by thought to realise the ideal in different ways and in different forms. Although the ways and forms of philosophical thought may be different in different cases, yet it has always the same goal before it. The common goal of all philosophical thinking is the attainment of a universal system of knowledge which explains all facts of the world in the light of one or more ultimate principles or realities. The final aim and object of thought may thus be said to be the knowledge of the ultimate reality or realities which explain all facts of the world. How far thought succeeds in giving us a knowledge of reality will appear from an examination of the main systems of knowledge constructed by it at different stages of its development.

At the perceptual level, thought gives rise to what may be called the common-sense view of the world. Reliance on perceptual thought and an exclusive emphasis on its objective side lead to the theory of realism in philosophy. Hence the ordinary view of the world is known as common-sense realism. It is also called naive or natural realism. The main character of this theory is its simple faith in the efficacy of sense-experience to reveal the reality of things as they are. For it, the things of the world really *are* what they are experienced to be. We experience many things in the world and we also experience that these things exist with their respective qualities independently of one another and of experience itself. Hence reality consists of many independent things which really possess all the qualities of taste, smell, colour, shape, size, etc., which we perceive in them. They are no doubt related to one another and to us in space and time. But they do not seem to depend for their existence and qualities on their relation to other things or to our minds. When we know them, they enter into relation with our mind. But they existed just the same when we did not know anything about them, and they would continue to exist all the same even when we would cease to know them. The existence of things with their qualities does not in any way depend on their relation to any mind, human or divine. Similarly, the spatial and temporal relations into which the things of the world may occasionally enter, do not apparently affect their existence and nature in any way. All things of the world are, therefore, real with all their perceptible characters independently of mind or consciousness; yet we have a direct apprehension of them in the act of knowledge. We know things directly just as they really are, and not indirectly through the medium of ideas or mental images. Like a beam of light, our consciousness directly reveals real

things and shows them in their real characters. Thus for common-sense or natural realism, the visible world of many, independent sensible objects is the real world.

A critical examination of the common-sense view of reality leads us to think that the world of sensible things is not real in itself, but that it is the manifestation of some supersensuous reality under the conditions of human sensibility and perceptual thinking. All the qualities which we perceive in things are relative to the nature and condition of the sense organs through which we perceive them. The sensations of colour, sound, smell, etc., depend on the specific energy of the nerves which are concerned in them. What is true of these secondary qualities is also true of the primary qualities of things, like their shape, size, etc. These also depend on the nature and condition of the sense organs which perceive them. The sensible qualities of things do not express the reality of things in themselves, but the ways and forms in which our sense organs react to their influences. If all the qualities which we perceive were really in things themselves, then the same thing should have contrary and even contradictory qualities in it. In the presence of the same thing, different persons may perceive different colours, tastes, smells, etc. Even the same person may have different sensations of colour, etc. in relation to the same thing under different conditions of his or her health. But for that we cannot say that a thing has such different and incompatible qualities, or that its qualities are sometimes present and sometimes absent in it. It is generally supposed that all of us perceive the same primary qualities in a thing, like its shape and size. Hence these must really belong to things, even if the secondary qualities do not. But on closer examination it will be found that even the primary qualities appear as slightly different to different perceivers according to their

different positions and organic conditions. If all the qualities of things thus appear to be different under different conditions, we are to say that the things themselves become different, for a thing is what it is because of its qualities. It is, of course, customary for us to say that a thing is a substance which has certain qualities in it. But what the substance of a thing is apart from its qualities we do not and cannot perceive. We *think* of a thing as a substance, but *perceive* only a group of qualities. So far as our sense-experience goes, a thing is a group of sensible qualities; and if the latter become different for different perceivers, the thing also must be so, and we cannot speak of it as being the same for all of us. It follows from this that what is one thing for one perceiver would be a different thing for another perceiver and contradict the first. Being thus contradicted, sensible things cannot be regarded as realities, but only as different appearances of some reality underlying them all. The naive realist's real world of many independent sensible things thus tends to dissolve into a world of appearances or phenomena. The sensible objects of the world are not real things by themselves. It is only when our senses react to the influences of a reality outside us in certain specific ways that we have sensations of various sorts. The contents of these sensations are interpreted by perceptual thought to be the qualities of things. The sensible world is the form in which reality appears to our senses and is judged by our perceptual thought. Apart from relation to our senses and perceptual thought, there are perhaps no sensible qualities and things. A thing does not taste sweet or sour by itself, but only when brought into contact with our organ of taste. Hence we are to say that sensible qualities appear when the reality of a thing comes into relation with our sense organs. Apart from any relation to our senses, the reality of things will have no

sensuous or physical characters, and should be regarded as supersensuous or hyperphysical. The world of sensible things or objects which is regarded as real in common-sense realism thus turns out to be the appearance of a supersensuous reality.

Let us now consider the neo-realistic theory of reality. Neo-realism is an important school of modern western realism. Although it owns allegiance to the old school of natural or naive realism, the theory of reality formulated by it is very different from that of the latter. While old realism is based on perceptual thinking, neo-realism is mainly the outcome of logical analysis and conceptual thought. As a result, the ultimate entities to which neo-realism reduces the sensible world of concrete things or objects are regarded as certain logico-mathematical concepts. Of course, neo-realism agrees with the other schools of realism in holding that all objects of experience are real and independent of experience. But according to neo-realism, both the objects of experience and the minds or selves which experience them are complex and analysable into simpler elements or constituents. Nothing should be treated as ultimate except the ultimates in which logical analysis terminates. The entities in which the logical analysis of all existent objects terminates are certain logical and mathematical concepts, like terms, propositions, numbers, equations, etc. These are simple and indefinable entities. Both mind and matter are analysable into such fundamental logical entities. Mind and matter are the two kinds of existents which we know. They exist in so far as they occupy some particular place or some particular time. They are quality-groups or events occupying some space or some time. Matter has been reduced by the modern physicists into motions, masses and electrons and protons, and these in their turn are reduced to equations and

formulae which are nothing but logical concepts. Similarly, mind and mental facts like ideas and emotions are complex entities which may be reduced to certain forms and formulae such as the stimulus-response, cross-sections, etc., and these in their turn are reduced to relations between terms and concepts. In this way the logical analysis of all existent objects reveals certain simple and indefinable logical concepts. These are the ultimate realities which generate by their relations other complex entities, physical and mental. But the ultimate entities are neither physical nor mental; they are neutral as between mind and matter. We cannot say anything more about them than that they *are*. They have no other character than that of pure *being* or subsistence. These subsistent entities are logically possible objects of thought, but they are not existents in so far as they do not occupy any position in time and space like other existents. As logically possible objects they are found not to be self-contradictory, i.e. they are consistent. But as not found in the actually existent world, they cannot be said to have any sensible existence. As logico-mathematical entities they have subsistence as contrasted with physical and mental entities which exist as particulars in space and time. Being purely logical, they cannot be identified with mind and matter, and the only way to characterise them is to call them "neutral entities." All complex entities like matter, life and mind may be deduced from these "neutral entities." One order and arrangement of the "neutral entities" give rise to matter; life and mind arise from different orders and arrangements of the same entities. The neutral entities are the ultimate constituents of all objects,—physical, biological and mental. But in themselves they do not possess any qualities or characters, except that of *being*. They have no substance or being as the substrata of qualities. They

possess a colourless blank *being* with no qualities. The universe of being or subsistence is inclusive of the world of things existents. The world of existent things is that part of the all-inclusive universe of being which is in space and time. The spatio-temporal world, therefore, derives its reality from the world of logico-mathematical concepts which are the simple entities, of which, in the last analysis, all things are composed. For neo-realism, this world of concepts is the ultimate reality.

It is, however, very difficult to understand how logical concepts can be identified with reality and how again from such logical concepts the concrete, existent objects of experience can be deduced. Concepts are general ideas or forms of thought which enable us to think *about* things in their general characters or in classes. Even the ultimate and simplest concepts which are revealed by the logical analysis of things are *about* those things and not identical with them. There is always a gap between our ideas or concepts and the objects or realities about which we have them. An idea or thought of pleasure or pain is not the same as the experienced feeling of it. Concepts are rather transcriptions of reality into thought and not the reality itself. They may refer to and try to reveal the nature of reality, but cannot be treated as identical with it. If this be true, we do not see how from logical concepts we can deduce actual existence or reality. The necessity of thought is not the same as the actuality of existence. The being or existence of a thing is different from our thinking of it, although it be a case of necessary thinking. The laws and concepts of thought cannot bring things into existence. The neo-realists, of course, credit their simple logical concepts with a sort of neutral being and call them neutral entities. But it seems to be a contradiction to speak of logico-mathematical concepts as neutral entities. If we

know certain entities to be logico-mathematical concepts, it is hardly consistent to characterise them as neutral. On the other hand, if they be really neutral, we cannot ascribe to them any numerical character and speak of them as "neutral entities" in the plural. A reality which is neither physical nor mental cannot be said to be one or many, for number has no relevance for what does not exist in space and as a physical or mental entity. The being which the neo-realists predicate of their neutral entities is not really a predicable character, but the reality which is pre-supposed by all concepts, entities and predicates. The ultimate concepts of logical thought have not the *character* of being, but have the being of thought. All of them *are* so far as they are thought of by us, or rather, are forms of our thought. Logical ideas and concepts *are*, as much as physical things and their qualities. Their being, however, is or consists in their being thought. Hence we are committed to the view that being which is the neo-realist's ultimate reality is identical with thought. But this will contradict the fundamental realistic position that reality is independent of thought or consciousness and that thought or mind is a complex grouping of "neutral entities" in a certain way. The neo-realist's "neutral entities" are, therefore, either logical fictions or forms of thought. The latter alternative is accepted by idealistic systems of philosophy which take thought or consciousness, in some form or other, to be the ultimate reality. We propose to consider next some of these systems.

In subjective idealism reality is reduced to subjective experiences, i.e. perceptions and ideas. For it, to exist means to be perceived or to be experienced by the mind. The objects of the world exist only as they are perceived or thought of by the mind. Hence their existence consists in the mind's perceptions or ideas. The existence of objects

outside and independent of mind, cannot be admitted, for their existence cannot be separated from their experiences. An object is inseparable from and identical with its experience. The mind also is nothing apart from the different kinds of experiences which constitute it. Thus for the subjective idealist, reality is a stream of different kinds of experiences. Things that appear to be outside the mind, our body as well as other objects, are merely percepts or ideas of the mind. This type of subjective idealism is exemplified in the Yogācāra school of Buddhist philosophy. In it, the mind consisting of different kinds of ideas, is regarded as the only reality. Berkeley's idealism is not subjective in the strict sense, for he admits the reality of the self and of God, although we have no perceptions or ideas of them. According to him, we have not any idea but a *notion* of the self and we know God as the cause or source from which ideas of objects are transmitted to our mind. He seems, therefore, not to reduce everything to all reality to subjective ideas or experiences of the mind. We have subjective idealism in the strict sense when the real world is pronounced to be a world of ideas and ideas alone.

In subjective idealism the problem of the relation between thought and reality is not explained, but rather evaded. That there is such a problem at all means that reality is something different from thought, although it be the object of thought. Thought is the mental activity to know reality. ✓ But the reality which thought seeks to know cannot be the world of thoughts themselves. In subjective idealism reality is reduced to a series of percepts and ideas which are only different kinds of subjective thought or consciousness. ✓ The series of percepts and ideas which constitutes reality cannot be the same for all individual subjects or selves. For every individual self, the real

ism in holding that reality is not merely a series of ideas or mental facts, but a rational system of objects. The real is a rational power or force which is the ground of both spiritual and physical, mental and material entities. The same principle which expresses itself in the mind of man is active in the body. All matter is animate and alive, even to its minutest parts. There must be some reason for the existence of everything. Hence the real is both the causal ground and the logical reason for the existence of all things in the world, mental as well as physical. The world of objects is a harmonious whole which is governed by logical principles and in which everything is rationally related to everything else. The real contains within itself the reason for the existence of all things and the occurrence of all changes in the world. It is, therefore, like a logical system in which from certain original propositions all others follow as necessary conclusions. There is the same necessity in the real universe as there is in a logical system. The fundamental principles of logical thought are, therefore, the same as the fundamental principles of reality. If we can discover the principles of thought, we would know the nature of reality itself.

Rationalistic idealism, however, logically leads to absolute idealism of the Hegelian type. To say that the real is a rational system of objects is to imply that it is a conscious spiritual principle which evolves the world of objects from within itself and holds them together as parts or factors of its life. The objects of the world can be rationally related to one another only so far as they are evolved by a rational mind and are the inter-related parts of its life. A rational force or power and, for the matter of that, a rational system, apart from relation to a conscious mind or self, are abstractions. A rational power is really the activity of a rational mind. Hence if the world of

objects is to be regarded as a rational system, it must be conceived as the product or manifestation of a universal mind or self. So also the principles of thought can give us an insight into the principles of reality only if reality is said to be of the nature of thought or mind. These are probably the main reasons why Leibniz's monadology starts with the conception of a plurality of eternal and self-contained monads but ends with that of God as the highest monad who created other monads and of which they are sometimes called "fulgurations" or manifestations. He thus closely approximates to the Hegelian form of absolute idealism which we shall consider next.

(In the idealism of Hegel and the Hegelians like E. Caird, Green and others, reality is a rational system of objects which is the manifestation of a universal, objective mind or spirit. The real world cannot be a series of ideas in the minds of individuals like ourselves.) Individual minds as subjects of experience must be necessarily related to some objects. Just as there can be no objects apart from relation to some subject, so there can be no subject of experience without relation to some objects of which it has an experience. The subject and the object being thus necessarily related to each other, neither can be reduced to the other. Hence reality cannot be only a system of objects as realism holds. Nor can it be regarded only as a series of ideas as subjective idealism maintains. Rather, it is a system in which individual subjects or selves are distinguished from and yet related to a world of objects. But the inter-relation of the subject and the object which are distinct and different from each other presupposes a higher unity by which they are differentiated and integrated as parts of itself. Hence underlying the world of finite subjects and objects there must be a unity which differentiates itself into them and still maintains

itself in its differentiations. Such a unity must be of the nature of mind or spirit. It must be the unity of self-consciousness. For, it is in self-consciousness that we have a unity which opposes itself as subject to itself as object and yet maintains its unity through the distinction and transcends the opposition of subject and object. Self-consciousness, in one aspect, is a duality, and in another aspect, a unity. The self exists as one self only as it opposes itself, as object, to itself, as subject, and yet immediately transcends that opposition. (The reality of things is to be found not in their isolated existence as independent entities, nor in their existence as essentially related to each other, but in their unities which manifest themselves in difference and yet are one with themselves in the difference. Reality realises and maintains itself in a process of differentiation and integration of differences. It is not a unity or identity apart from difference, but an identity-in-differences, or differences-in-identity.) It is the concrete universal as realised in the differences of objects, and not an abstract universal which is a pure identity apart from all differences. The real is the ideal or spiritual unity which manifests itself in the world of changing appearances. Reality lies not in the unrelated individual nor in one individual as related to other individuals, but in the principle of the relation among individuals, i.e. the universal which differentiates itself in the individuals and yet is one with itself in them. This principle is the unity of self-consciousness as realised in the differences of the world of finite subjects and objects. As such, "the real is the rational or intelligible". It is capable of being thoroughly understood by the intelligence or reason in us, because it has in it the essential nature of intelligence or self-consciousness. (It follows that reality is a necessary process or development of thought and that it can be known only by thought.)

Thus thought becomes identical with reality. Of course, in ordinary thinking there is an opposition between thought and its object, and the relation between them seems to be external and accidental. But the thought which takes the form of self-consciousness makes the object an element of itself; it finds itself in the object as its *other* and realises itself through its relation to the object. Such thought truly expresses the nature of reality and is the same as absolute consciousness. Our thought is a reproduction of this universal and objective thought. It can rethink the forms and concepts of universal thought. We reach the highest stage of knowledge when our thought grasps the idea or thought of the world and retraces the operations of the universal thought, its categories and notions. The concepts of human thought at the level of self-consciousness are the reproductions of the universal concepts of absolute thought; the dialectical evolution of the concepts in our mind coincides with the objective evolution of the world and the categories of our thought are the categories of reality. Hence, according to Hegel, thought is identical with reality, and logic with metaphysics.)

The Hegelian view that thought is identical with reality does not, however, seem to be acceptable. To say with Hegel that thought is identical with reality in the sense that it is the same as reality and that from a study of the nature of thought the nature of reality can be fully known, is to cut the ground underneath all thought and to obliterate the distinction between subjective and objective idealism. All human thought is an attempt to know reality which is *other than* thought. Hence reality as the object of thought must not be the same as thought itself. It must be distinct from thought and somehow independent of it. Finite thought, as we know it, does not and cannot create the being of the object thought of by it. Although an

empirical object may be said in some sense to be constructed by the knowing subject, yet we have to admit some independent being or reality as the basis of the construction. It is with reference to a reality transcending it that our mind constructs the objects of knowledge. This reality or being underlying an empirical object of thought is other than and distinct from thought. In the face of this obvious distinction between thought and reality we do not see how it is possible to identify the one with the other. If, however, we say that reality has no meaning apart from our thought and that it is what it is as an object of thought and, therefore, it is the same as thought itself, we reduce reality to a system of thoughts and ideas and revert to subjective idealism in a form. To say that the thought which is identical with reality is not finite thought, but the universal, objective thought is not really to avoid subjective idealism. We do not know whether there is any universal thought except through our thought. Hence it is only a matter of thought for us. Or, if there really be such a universal thought over and above our thought, it must transcend our thought and so cannot be known by us. As such, it would be an unknown and unknowable reality which has no place in objective idealism of the Hegelian type.

Then, again, we find it difficult to understand how thought, even when lifted to the level of self-consciousness, can be identical with reality. In self-consciousness, as Hegel explains it, there is a real distinction between the subject and the object. In it the object is really other than the subject. Here the self is said to oppose itself as object to itself as subject and also to transcend the opposition. But how in self-consciousness the self transcends the opposition between subject and object is not explained. If it transcends the opposition in the sense that in self-consciousness the distinction between subject and object is

altogether lost, then there would not be any self-consciousness in the Hegelian sense. We do not deny that the self as pure consciousness transcends all distinctions including that of subject and object. But, then, it would be a thought lifted to the level of self-consciousness with its inherent distinction of subject and object. It would be the reality transcending all thought.

What induced Hegel to believe that thought is identical with reality is the consideration that each of them is an identity-in-difference. But while thought may be said to be an identity-in-difference, it is difficult to see how reality can be regarded as such. In thought the original unity of feeling or immediate experience is sundered into a subject and an object and their relation to each other. In it what is at first an undifferentiated experience becomes differentiated into the parts of one whole. In relation to such thought the object of experience also becomes an identity-in-difference. An object of thought, like a tree or a table, is one thing which comprises different parts and aspects. Its parts and aspects may change, but for our thought it remains identical through them, i.e. is an identity-in-difference. But it may be pertinently asked here: What is the identity of the thing and how is it related to its differences? Is there any real identity in the thing corresponding to our idea or thought of its identity? A critical examination of the thing will show that nothing remains identical in it amidst its changing parts and aspects. Even if there be such an identity, the question of its relation to the differences of parts and aspects remains open. If we say with the Hegelians that it is realised in the differences of parts and aspects, then the identity will have *being* only in the differences. But, as such, it will cease to be an identity and will be lost in the differences. Hence even if an object of thought be *represented* as an

identity-in-difference, we do not see how it can really be such. It follows that reality cannot be an identity-in-difference. If anything is to be a real identity, then we speak of it, not as an identity-in-difference, but as an identity-above-difference. A moving body passes through different positions and yet remains the same in so far as its changing positions do not really affect its existence as a body. Hence identity-in-difference which is the form of thought cannot be treated as the form of reality. If thought by its very nature is an identity-in-difference, then it cannot be regarded as competent to give us the knowledge of reality, or as identical with reality.

In the absolute idealism of F. H. Bradley¹ we find a different view of the relation between thought and reality. While Hegel asserts that thought is identical with reality, Bradley maintains an essential distinction between thought and reality and holds that thought is something less than reality, or that reality is more than thought. According to Bradley, reality is the object of thought; it is not, like Kant's thing-in-itself, quite outside and independent of thought, for it is impossible to think of anything which can exist quite outside of thought. But while reality is the object of thought, it is not merely so, it is something more than thought. Thought is one element in reality as a whole and, as such, is less than the whole of reality. Thought gives us some knowledge of reality no doubt, and that knowledge is true and positive so far as it goes; but the knowledge is not complete and exhaustive, it is partial and incomplete.

As to the general nature of reality, we are first told by Bradley that ultimate reality is such that it does not contradict itself. This is an absolute criterion for truth and reality. What is contradictory or inconsistent with itself

¹ *Vide Appearance and Reality.*

cannot be real, but must be an unreal appearance. What is real cannot have contradiction or inconsistency within itself. This means positively that reality is self-consistent. Now all appearances must belong to reality. ~~Political~~ appears is and whatever is cannot fall outside the real. In view of this we are to say that reality contains all appearances in a harmonious form. The appearances are in reality in such a way as to be self-consistent. The diversity of appearances must somehow be at unity and self-consistent, for they fall within reality, and reality excludes discord. Reality is not many; there are not many independent reals. If there were many independent reals, they could not co-exist and interact so as to form one world. Any relations among the many reals would destroy their independence. Relations have no meaning except within and on the basis of a substantial whole; and related terms, if made absolute, are forthwith destroyed. Hence the many reals are to be regarded as features and aspects of a unity. Reality is the unity of all things; it is an individual and a system within which all things exist harmoniously. "The universe is one in the sense that its differences exist harmoniously within one whole, beyond which there is nothing." Thus reality is, so far, the harmonious system of all things.

As to the concrete nature of reality as a system, Bradley tells us that the matter or content of reality is experience which means 'something much the same as given and present fact.' This means that the things of which reality is the system are neither mere objects apart from experience, nor merely subjective experiences apart from objects. Rather, they are experienced facts, facts in which being or existence and sentience are indissolubly and indistinguishably united. 'To be real, or even barely to exist must be to fall within sentience. Sentient experience is reality, and

what is not this is not real.' There is no being or fact which is not somehow experienced, or which is outside of what is commonly called psychical existence. Whatever is somehow experienced; apart from some perception or feeling of it we cannot speak of the existence of a thing or of any aspect of its being. We cannot find fact unless in unity with sentience, and the one cannot be divided from the other. 'Reality is, therefore, sentient experience. To be real is to be indissolubly one thing with sentience. Being and reality are one thing with sentience; they can neither be opposed to, nor even in the end distinguished from it.' Thus for Bradley, reality is one system, and its contents are nothing but sentient experience. Hence it will be a single and all-inclusive experience which embraces all diversities in concord. It cannot be less than the diversity of appearances, and hence no feeling or thought of any kind can fall outside its limits. Even if it be more than any feeling or thought which we know, it must be of the same nature as sentience. For to assert any reality beyond sentience is to use self-contradictory and unmeaning expressions. Reality is thus a harmonious system in which being or existence is one thing with sentience, and all diversities or appearances are embraced in concord. It is 'a whole in which distinctions can be made, but in which divisions do not exist.' Reality being harmonious, its elements must not collide. In it idea must not disagree with sensation, nor must sensations clash. As such, there cannot be in the absolute reality any unsatisfied desire or any practical unrest. Hence we must believe that reality satisfies our whole being. In it our main wants—for truth and life, for beauty and goodness—must all find satisfaction. It is one comprehensive experience which includes and harmonises every element of the universe.

It is not possible for finite beings to realise fully the

nature of the absolute reality. In order thus to know the absolute we have to become absolute, and then we should cease to exist as finite. But while it is impossible to fully realise the absolute, to have the specific experience in which it consists, we can form the general idea of an absolute experience in which phenomenal distinctions are merged and which contains all diversity but is not parted by relations. The finite intellect can attain the general idea of the absolute in the light of certain experiences which we have of a whole which is beyond relations though full of diversity. In mere feeling or immediate presentation and in the experiences involved in the ideas of goodness and of the beautiful, we have the experience of a whole which contains diversity and harmonises them into a unity. From these experiences we gain the knowledge of a unity which transcends and yet contains every manifold appearance. But such knowledge consists only in an abstract idea of the absolute reality, which is very different from an experience of it. Hence the knowledge of reality given by our intellect or thought differs enormously from reality itself. Thought by its very nature falls short of reality, it is something distinct from and less than reality. This will become clear when we consider the essential nature of thought.

In anything real we find two aspects, an existence and a character, a 'that' and a 'what'. A real is an existent with a certain character or content, it is something which is so-and-so. These two aspects of the real are inseparable. We can distinguish them, but never divide or separate them. A thing must have some character and a character must qualify some thing. That a thing should be and yet be nothing in particular, or that a character should not be the character of anything, is obviously impossible. Thus in the reality of a thing existence and character are inseparably connected. Yet thought seems

essentially to consist in their separation and division. Thought is clearly ideal and cannot but work through ideas. Now an idea involves the separation of content from existence. An idea does not exist like a fact, but is 'any part of the content of a fact so far as that works out of immediate unity with its existence.' To think of a rose as red is to separate the content of 'red' from the particular existent, rose, and have an idea which may be predicated of other existents as well. Thought in its completed form is a judgment and in judgment an idea is predicated of a reality. In a judgment a predicate qualifies a subject. The predicate is a mere 'what', a mere feature of content which is used to qualify the 'that' of the subject. While the 'that' or the subject is an actual existence, the predicate is only an ideal content and not a fact. In every judgment we find an aspect of existence, present in the subject, but absent in the predicate; and the judgment consists essentially in the synthesis of these two aspects. "Judgment is essentially the re-union of two sides, 'what' and 'that', provisionally estranged. But it is the alienation of these aspects in which thought's ideality consists." These two aspects being inseparable in reality, thought is bound to fail to give us a knowledge of it.

Thought by its very nature makes a distinction between existence and character, the 'that' and the 'what'. In its actual processes and results it cannot transcend this dualism. If thought tries to transcend the dualism between subject and predicate, it aims at suicide. If the subject be the same as the predicate, there would be no need for any judgment and, therefore, no thought. Judgment requires that the predicate must be different from the subject. Thought predicates an ideal content of a subject. The ideal content is the predicate and it is not the same as the fact of which it is predicated.

The subject is more than the predicate, and is a 'that' beyond a mere 'what'. The subject has an aspect of existence which is absent from the bare predicate. When the distinction between the subject and the predicate is transcended, there is no room left for thought. This is what happens in the case of sensible experience or immediate presentation. If thought were to give up its relational and discursive nature and identify itself with feeling or immediate experience, it would cease to be itself. The ideal nature of thought thus prevents it from being an experience of existence and reality.

Self-consciousness is regarded by Hegel as a form of thought in which there is identity between thought and reality. This, however, is not true. There is no self-consciousness in which the object is the same as the subject, or the object of consciousness exhausts the whole self. In self-consciousness, we are told, the self opposes itself as object to itself as subject and immediately transcends the opposition. But the self as object of consciousness is not identical with the self as the subject. Rather, it is a part or element of the total self which becomes distinct from the whole mass and stands over against the felt background. In self-consciousness what one feels cannot wholly come before him as object. If one were to become exhaustively conscious of his self he should pass through a long series of experiences and be conscious of them all at once. This being psychologically impossible we are to say that in self-consciousness the object is something less than the self as a reality. Self-consciousness, therefore, affords no ground for the identification of thought with reality.

Bradley's position with regard to the problem of thought and reality may be summed up as follows. According to him, reality is a single and all-inclusive

individual experience which harmonises all phenomenal diversity and difference into a unity. In it there are distinctions and diversities no doubt, but these are so fused that all differences and divisions are healed up and the relational form of experience is wholly merged. It would be experience entire and complete, containing all elements in harmony. Such an individual whole of experience would possess in a superior form that immediacy which we find more or less in feeling. In relation to such reality thought finds itself baffled in the attempt to comprehend it. Thought is committed to the dualism between subject and object, which is transcended and merged in reality. It stands on and develops the relational form of knowledge. It is an attempt to unite differences which have broken out of immediate experience. The identity of being or reality with sentience or experience is, therefore, unattainable in thought. If thought can transcend its inherent dualism and attain the immediacy of feeling as a harmonious whole, containing and yet transcending differences, it would cease to be thought and would be present as a higher intuition. With the help of thought we can form 'the general idea of an absolute experience in which phenomenal distinctions are merged, a whole become immediate at a higher stage without losing any richness'. But to realise the absolute life or reality in detail we are to transcend thought and attain the specific experience or higher intuition which is the same as absolute reality itself. This, however, is impossible for finite beings. To have certain knowledge of the absolute reality, we are to realise the general features of the absolute and see that somehow they come together in a way known vaguely and in the abstract. Yet our knowledge of the absolute is, so far as it goes, real and positive knowledge built on experience, and inevitable when we try to think consistently.

Although Bradley's view of the relation between thought and reality is an advance on Hegel's in some respects, yet it does not seem to be completely free from a Hegelian bias and its inherent difficulties. ~~W. L. G.~~ refuses to identify thought with reality on the ground that the relational form of thought is merged in the absolute, he speaks of reality as a harmonious system in which there are distinctions and diversities, but no divisions and conflicts. But if, as he himself admits, there can be no distinction without difference, we do not understand how the relational form of thought can be transcended in the absolute. He says: "There is no such thing as a distinction which, merely adventitious, supervenes wantonly, or is superimposed in the absence of a ground." "And a distinction," he says further, "grounded on no difference may certainly be called a monster incapable of life except within a one-sided theory."¹ If this be true, then we are to say that the absolute contains the differences of objects within itself as parts of a unitary system. And with this we return to the Hegelian idea of reality as an identity-in-difference and as a relational system which is essentially of the nature of thought. But for Bradley identity and difference are inconsistent categories and both of them lead to an infinite process. Identity is not mere resemblance nor is it merely abstract. There is in our mind no positive idea as numerical sameness and diversity. There is an inherent discrepancy between identity and diversity. Hence reality cannot be an identity-in-difference. Similarly, a relation is always self-contradictory. It implies two terms which are finite and claim independence. On the other hand, a relation is unmeaning unless both itself and its terms are the adjectives of a whole. Hence the relational form must be wholly transcended in the absolute and with

¹ Bradley, *The Principles of Logic*, V. II, p. 664.

it thought also must disappear. But if there are no relations and no thought, we do not see how there can be any phenomenal diversity in reality. There can be no distinctiveness without relation. In the absence of all relations the phenomenal distinctions said to be contained in the absolute would disappear. Bradley, of course, thinks that nothing is lost in the absolute and all appearances somehow belong to reality. But he cannot admit any relation between them, since the absolute transcends all relations and is supra-relational. Again, for him, appearances as such are not retained in the absolute, they are transformed and suppressed in it. If this be so, then the objects of our actual experience are lost in the absolute and they cease to belong to reality. Bradley holds also that the absolute as one absorbing, individual experience embraces and harmonises all experiences, though, as such, transmuted and suppressed. But he has to admit that we cannot construe such an experience to ourselves. Yet he believes that it is within our power to say that it is real and that it unites certain general characters within the living system of one undivided apprehension, and further that, at least from the point of view of thinking, it is free from self-contradiction. But here he seems to take a different view of the relation between thought and reality, and to accept the Hegelian view of the absolute as a rational and relational system which can be comprehended by thought. Hence on the Bradleyan view the relation between thought and reality is left uncertain and ambiguous.

We have passed in review the main systems of philosophy representing different stages in the progress of thought towards its goal which is the knowledge of reality. When one considers these and other systems which have appeared in the history of philosophy, one is struck by the wide diversity of views among philosophers with regard to

the relation between thought and reality. While some philosophers like Hegel would identify thought with reality, others like Bradley would consider thought to be less than reality and capable of giving only a partial and incomplete knowledge of it. There are still others like Bergson who would say that the intellect with the function of thinking distorts and falsifies reality, and that it is not by the intellect but by intuition that we are to grasp reality. These different views about the relation between thought and reality arise out of different conceptions of the nature of thought and reality themselves.

It would appear from the history of philosophy that both reality and thought have been understood in various senses. For the empiricists, the real is that which is given in sense-experience or is verifiable in sense-experience, either directly or indirectly. According to the Buddhists and the pragmatists, that which is practically efficient and useful is real. For philosophers like Heraclitus, Bergson and some neo-idealists, reality is continuous change or perpetual becoming. For many rationalistic thinkers, reality is unchanging and eternal, and does not contradict itself nor is contradicted by anything else. For some other rationalists like the Jainas, reality is both changing and permanent. Again, while the realistic thinkers hold that reality is objective and independent of mind, some idealists maintain that it is subjective and mental. There are still other realists who hold that reality is neither subjective nor objective, neither mental nor material, but neutral. Again, some idealists like Hegel would say that reality is both subjective and objective, that it is the spirit as the rational unity of both. But other idealists hold that reality is pure being or consciousness which transcends all relations including that of subject and object.

With regard to the nature of thought also we find a

similar diversity of opinions among philosophers. Broadly speaking, there are three main views with regard to the nature of thought. According to one view, which is generally accepted in philosophy, thought is the analytic understanding in us. The activity of thought consists in analysing the object of thought into its constituent elements and explaining it as the product of the combination of the simpler elements. It discriminates one object from other objects and also from the subject of thought or the thinker. It also makes a separation between the existence and the characters of an object and regards them as externally related to one another, or treats the object simply as an aggregation of different characters. It serves the ends of our practical life by holding before it certain relatively fixed and stable contents with which it can deal effectively. Thus understood, thought is analytical and discursive in its nature. It follows from this that if reality be a living flow like Bergson's *elan vital*, or a non-relational system of experiences like Bradley's absolute, or even an organic unity of the subject and the object like Hegel's, thought as analytic naturally fails to give us any knowledge of reality or at least an adequate knowledge of it. This is the reason why Hegel, Bradley and Bergson, who differ so much in their conceptions of reality, agree in holding that analytic thought cannot give us knowledge of reality. To Hegel, thought as analytic fails to comprehend the organic unity of reality. Bradley seems to regard thought as analytic and relational in its general nature and, therefore, incompetent to give us a complete knowledge of reality. Bergson treats all thought as discursive and dissecting by its very nature and so incapable of giving us any knowledge of reality which is one continuous flow. But, then, there is a second sense in which thought is taken to mean, not the analytic understanding, but the synthetic

reason in us. This is regarded by many only as a higher form of thought, and not anything which is not thought at all or is essentially different from thought. This thought also works through distinctions of subject and object, substantive and adjective, existence and content, etc. But while analytic thought reduces the unity of things to their differences and explains it as the result of their external relations, synthetic thought treats the differences and distinctions as the expressions of an internal unity without which they lose all reality and significance. For the one, the difference of subject and object, or of substance and attribute is irreducible, and their unity is only a name for their juxtaposition or external relation. For the other, all differences are the realisation of an identity. For synthetic thought or reason, therefore, all identity is identity-in-difference and all difference is difference-in-identity. It follows that if reality be an identity-in-difference or the organic unity of subject and object, the only way to know it, is through thought as synthetic reason. Hegel's identification of thought with reality is thus the logical outcome of his view of thought and reality as both identity-in-difference. For some idealists like Bradley or Sāṅkara, however, reality being a non-relational whole of experience or pure consciousness, even synthetic thought is not only not reality but also incompetent to realise reality as such. To comprehend reality as thus conceived, some thinkers speak of pure thought or intuitive thought. This is the third sense in which thought has sometimes been understood. In Neo-platonism pure thought as the first stage of being is explained as the intuitive thought in which thought and its ideas, subject and object are one. It is pure consciousness in which there is no distinction of subject and object or of the thinker and his thought. It is a kind of contemplative experience in which thought simply *is*, but we cannot

say that *someone* thinks of *something*. It is a subject-objectless consciousness in which thought becomes what reality is, i.e. literally *realises* itself as pure consciousness. Whether thought in this sense can be called thought proper is open to question. Some thinkers would say that it is not thought at all but a higher intuition or mystical experience beyond all thought and reason.

Now we proceed to explain the position here taken regarding the relation between thought and reality. As we have seen above, reality may be, and has actually been, understood in different senses. Underlying these different meanings, however, we may find a common basis on which they all depend. It is on the basis of some experience that we speak of reality in one sense or other. That of which we have or can have no experience cannot be called real in any sense. So we say that whatever is experienced is real in some sense. That which is actually experienced cannot be utterly unreal or mere nothing. Of the utterly unreal or of nothing we can have no experience. While that which cannot be experienced in any way is utterly unreal, that which is experienced somehow *is* and is real in some sense. But although what is given in some experience is real in some sense, it is to be regarded as real in a restricted sense. Its *prima facie* claim to reality is subject to certain limitations. To be experienced in any way is to be real in that way only, but not in all ways. This is especially the case when what is given in one experience is contradicted by some other more stable and reliable experience. The sun as perceived by the naked eye looks like a small disk, but when seen through the telescope it is of an immeasurably vast size. What is perceived by the eyes as a solid body may be felt by touch to be only a plane surface. From the standpoint of such stable, higher experience we say that what is given in a momentary or less reliable

experience is unreal, although it may appear to be real for the latter experience. Generally speaking, we may say that what is given in one experience but is contradicted by a more reliable and wider experience is real for the first and unreal for the second. The snake perceived in a rope is regarded as real so long as the perception of it continues. But when this perception is contradicted and cancelled by a closer and more stable experience, we say that the real thing is not the snake, but the rope. What is given in our normal and general experience is thus regarded by us as more real. But even the objects of such common experience are sometimes contradicted or liable to be contradicted by other experiences. Hence they cannot be called real in the highest sense. Judging by the criterion of experience, we are to say that what is given in all experiences and is not contradicted or liable to be contradicted by any, is absolutely real. What is thus experienced in all ways, i.e. is always experienced is real in the highest sense. From the standpoint of such universal experience and the absolute reality given in it, all that is given in our ordinary momentary or stable experiences may be regarded as unreal, although they are considered to be real from the standpoints of their respective experiences.

In its general sense experience means any form of immediate consciousness. Consciousness is immediate if and when it is a consciousness of what is felt as directly given and so does not require any process of inference or reasoning to bring it before consciousness. There may or may not be thought in the sense of judgment in experience. But that is not essential for experience as such. Its essence lies in the feeling of immediacy of the consciousness we have in it. Taking experience in this general sense we may distinguish three grades of it. First, we have what may be called an individual's private experiences. The

experiences which this or that individual has in illusion, hallucination, dream, etc. are peculiar to him and are not usually shared by other individuals. These experiences are of individual and temporary nature, and are contradicted by the experiences of other individuals or of the same individual under different conditions. Secondly, we find that there are certain experiences which are more or less common to all individuals under normal conditions. Our normal waking experiences belong to this class and may be called the common experiences of mankind. These are public and relatively permanent in the sense that they are shared by all normal individuals and persist or recur in almost the same form under the same or similar conditions. But even these normal waking experiences are found to contradict one another in so far as one excludes and is excluded by the others, and there is always the possibility of their being changed or even destroyed with the changing conditions of our life and its experiences. As distinguished from both an individual's private and our common normal experiences, we may speak of experience *as such* or of pure experience. While the first two kinds of experience consist of particular forms of consciousness and relate to particular objects, pure experience is not consciousness of any particular form, but simple consciousness common to all its forms. It is consciousness without necessary relation to either the subject or the object of consciousness. Pure experience is present in all particular forms of experience, since these are also experience *as such*. It is, therefore, neither contradicted nor contradictable by any experience. We have some evidence of the existence of pure experience in dreamless sleep in which there is consciousness no doubt, but not of any external objects as in our waking and dreaming states. We may also be introspectively aware of such pure experience or consciousness as present in or under-

lying all our ordinary waking experiences. But pure experience is only realised in a state of deep concentration (*samādhi*) in which all the specific modes and forms of consciousness disappear and what is left is formless consciousness which simply *is* and is thus also pure existence.

Corresponding to the three grades of experience we may speak of three grades or orders of reality, namely, the apparent or ephemeral, the empirical or practical, and the transcendent or absolute. The objects of our private, individual experiences in illusions, dreams and the like possess only an apparent existence. They cannot be called utterly unreal, since they appear to exist and are somehow perceived, while what is utterly unreal, like the child of the barren mother, can never appear to be there or be perceived. But as they are contradicted by our general and normal waking experiences, they cannot be regarded as real without qualification. They are to be regarded as less real than the objects of our normal waking experience which contradict them. Hence we are to say that they have an apparent reality as distinguished from utter unreality, on the one hand, and the more stable reality of the objects of normal waking experience, on the other. As compared with them, the objects of our common, normal experiences are to be regarded as more real. The world of our normal waking experience consists of particular and changing physical things and conscious minds or subjects existing in space and time and related to one another in different ways. This common world of our experience has its basis in our common sensibility and understanding, and is itself the basis of our practical life. It exists in more or less the same way for all experiencing subjects who have the same sense organs and understanding with which each of us is endowed. It is also necessary for our ordinary life and the satisfaction of our practical needs. As such,

it has a more stable existence and a greater practical value than the objects which only appear momentarily in illusions, dreams and the like. Hence it is regarded as more real than the ~~also~~ matter. But all the particular things and beings of the world of our common experience are found to exclude and ~~co~~ contradict one another, or at least to be logically liable to contradiction. So also the world as a whole is open to possible or future contradiction. Hence it cannot be regarded as absolutely real. It is real for our common, sense-experience and understanding and also for our practical life and its necessities. It has what may thus be called empirical or practical reality like the one which belongs to *paper-money* issued by the state. As distinguished from both the apparent and the empirical reality, we may speak of the transcendent or absolute reality. The objects of our private or common, normal experience are particular and changing forms of existence which are either actually contradicted or logically contradictable. What is, however, given in pure experience is not any particular form of existence, but simple existence which is common to all its forms. This pure existence is neither contradicted nor contradictable by any experience. When an illusory object is contradicted by an experience, we only deny that the existence there is of that particular form and not that there is some existence. Even when a dream object is contradicted by waking experience, we do not deny that the experience or idea existed in the mind during dream. And when we think of a time or place where nothing exists, we are thinking of the existence of at least that time or place. So existence as such is as wide as experience and we cannot conceive of the absence or denial of existence. This universal, pure existence is thus the only thing whose contradiction is unthinkable. And this pure existence is the same as pure consciousness. For, what is revealed in pure

experience is just pure, self-revealing consciousness. So also, pure experience or consciousness is itself pure existence. Pure consciousness simply *is*, but is not anything in particular, and is, therefore, pure self-revealing existence. It reveals itself, not in any particular form like the subject or the object of experience, but as pure and simple existence. So we see that pure existence is not something which stands over against pure consciousness as an object to it, but is itself pure, self-revealing consciousness. This pure existence-consciousness being neither contradicted nor contradictable is to be regarded as real in the highest sense or as the transcendent, absolute reality. It transcends our ordinary experience no doubt, but not all experience, being given in and identical with pure experience.

The three grades of reality, explained above, should not be taken as three kinds or degrees of reality. In ordinary life and conversation we may refer to them as different kinds of reality, each of which is independent of the others. But this leads to a plurality of reals which can hardly be shown to be so related as to form one unitary world. To maintain their obvious difference and, at the same time, to explain their inter-relation, some thinkers like Bradley speak of degrees of reality. This, however, would be true, if reality were a growing stuff or system that augments itself from one stage to another. But for us, reality in the highest sense is pure existence-consciousness of which there can be no more or less. Hence instead of admitting different kinds or degrees of reality, we should speak of different orders of reality. It is the same reality that is present in the three grades, but in different orders. It may well have many other orders, according to the many possible grades of experience. But there are three orders which we can generally distinguish in the light of the three grades of our experience. These we call the transcendent,

the empirical and the apparent order of reality. The first is the trans-empirical order of reality as pure existence-consciousness. It is free from all particularity, duality and ~~friction~~ and the conflicts inherent in them. As such, it is also perfect freedom and infinite bliss. What we call empirical reality is only the empirical order of the same reality. This is the order not of pure existence and consciousness, but of existence as a world of finite objects and subjects, and of consciousness as particular experiences arising out of the relation between subject and object. The transcendent reality appears as this visible world of subjects and objects in relation to our senses and the understanding or thought in us. The empirical world being what the transcendent reality appears to be in relation to our sense and understanding may be regarded, in a sense, as a world of appearances. But since our sense and understanding originate from the transcendent reality itself, we are to say that the empirical world is a manifestation of it in the sensuous and intellectual order. Even in the empirical order pure existence-consciousness is present in all particular forms of existence and consciousness, since these also are existence and consciousness as such. Not only minds and mental states but external objects also are particular forms of existence-consciousness. The character of revealing its existence, for which we regard a mental existence as conscious, belongs also to the external objects as it would appear from the fact that they reveal their existence when we perceive them. Thus the empirical world may be regarded as the manifestation of transcendent reality in the subject-object order. We cannot understand how or why the empirical arises out of the transcendent order of reality. But we must admit some power of manifestation or free expression in the transcendent reality in order to explain the relation between the two orders without committing

ourselves to a pluralistic or dualistic view of reality. This would also obviate the necessity of our regarding the empirical world as being negated or even transmuted and suppressed in the absolute reality. We are to say only that the empirical world is the objective, manifested form of the unmanifested, formless absolute reality. It does not so much participate in or derive its reality from the absolute as make manifest the absolute itself in the form of the visible universe. It has the reality of the objective order of manifestation of the absolute which is both immanent in and transcendent over it. It is objective in the sense that it is common to and universal for all experiencing subjects like us, and is relatively permanent. As compared with it the world of our private and individual experiences in illusion, dream and the like, is to be regarded as only apparently real. The objects of illusory and dream experiences cannot be rejected as utterly unreal like the child of the barren mother. They are objects of our actual experience, although in their case the normal conditions of experience are either absent or vitiated by certain subjective conditions of the experiencing individuals. As such, they may be regarded as belonging to the order of subjective manifestations or temporary appearances of reality. Even in them absolute reality is present in so far as they are particular forms of existence and consciousness *as such*. They have as their ultimate basis or locus simple existence and consciousness. Existence and consciousness *as such* may be said to appear as illusory or dream objects in relation to our sense and understanding when these are influenced by positive or negative abnormal conditions. If, then, the objects of our common, normal experiences are regarded as the objective manifestations of absolute reality, those of our private and individual experiences are to be regarded as subjective manifestations of it. What distin-

guishes them is the fact that while the latter are generally of an individual and temporary nature and have no practical value, the former are public and relatively permanent and also necessary for our practical life. But even this distinction cannot be always maintained. Some illusory or dream experiences like the perception of the sun's motion are found to be common to all normal individuals and also to have certain consequences in our practical life. Hence it is reasonable to hold that what we call apparent reality is after all the order of subjective manifestations of absolute reality. To sum up our position: There are three orders of reality. In the transcendent order, reality is universal, pure existence-consciousness which is neither any subject nor any object nor the unity of subject and object. In the empirical order, it is manifested as the visible universe of subjects and objects which exist in time and space and interact with one another so as to form one common and relatively permanent world-system. In the apparent order, it takes the form of an impermanent, fragmentary world of subjective appearances.

We have briefly explained our view of reality and its three grades or orders to prepare the way for answering the question as to the relation between thought and reality. We have also explained at the outset the general nature of thought and, subsequently, the different senses in which thought may be understood. It would appear from all that we have already said regarding it that thought in the strict sense is a judgment of something as such-and-such. It is generally an intellectual understanding of some given fact of experience as a thing having certain qualities, actions and relations, and belonging to a certain class and denoted by a certain word or group of words. It is thus a mental act of determination of some given experience through certain general ideas or concepts like those of substance, quality,

action, relation, etc. It always implies a subject that thinks and some determinate object that is thought about. There can be no explicit thought, and that is thought in the strict sense, which is not consciously centered in some subject and referred to some determinate object. Any thought that no one thinks and that thinks of nothing in particular can hardly be called thought proper. It follows that thought cannot transcend the relation of subject and object and other relations involved in the conceptual understanding of both as definite and determinate entities. The objects of thought need not necessarily be the particular physical existents of sense-experience. These may well be mental existents or abstract qualities and principles or universals and even non-existent or apparently existent entities. For anything to be a possible object of thought what is necessary is that it must be something determinate, and not that it must be physical or mental, concrete or abstract, existent or non-existent. It is also necessary that the object of thought must be related to some subject or thinker and must itself be the logical subject of certain predicates. Thus thought in the strict sense is limited to the determinate world of subjects and objects of different kinds and their various relations.

It follows from the above that the capacity of thought to understand reality is limited. While it gives us the knowledge of the apparent and the empirical order of reality, it fails to grasp the transcendent or absolute reality. With regard to the apparent and empirical orders of reality, we may reasonably say that thought not only gives us a knowledge of them but is partially constitutive of them. In these orders, the real may be said, in a sense, to be constituted by the knowing of it. An object of knowledge, like a table, is constituted by thought in the sense that the object is not any or all of the sense-data that we immediately experience, but what our thought means or understands by

them. This applies in the case of both internal and external objects of knowledge. In both cases, the immediately given datum or data of consciousness are worked up by our thought or understanding into complex entities like substances with qualities or subjects with predicates which exist in certain relations in space and time. So what we get in the apparent or empirical order of reality are just fitted to the nature of thought and so knowable by our thought or understanding. They are particular forms of existence and consciousness given in our individual or common experiences and are, therefore, amenable to the conceptual determinations of our thought and understanding. But when we transcend the apparent and the empirical order and come to the transcendent order of reality as pure existence-consciousness, the limitations of thought become manifest. Of pure existence or consciousness, there cannot be any thought in the strict sense. We can think of particular forms of existence or consciousness, but not of existence or consciousness which is not of any specific form, i.e. of existence or consciousness, pure and simple. To think of anything is to determine it as such-and-such. But pure existence or consciousness is indeterminate and cannot, therefore, be thought of as being such-and-such. With regard to it, as Spinoza rightly observed, 'every determination is negation'. Hence if thought is under the necessity of determining it somehow, it is liable to the risk of negating and losing it. But although thought as an intellectual attempt to know reality fails of its purpose in the case of transcendent reality, yet as a rational criticism of our ordinary experiences and common views of the world, it shows the necessity of admitting the transcendent reality. What is contradicted or contradictable cannot be accepted by thought as ultimately or absolutely real. The world of subjects and objects, or of particular forms of existence

and consciousness, as given in our ordinary experiences, being liable to contradiction cannot be recognised by critical thought as absolutely real, although as experienced facts they may be regarded as real in some sense or other. It is pure existence-consciousness, which reveals itself through all existences and all experiences and is not or contradicted nor contradictable, that can be admitted by critical thought as absolutely real. Although critical thought thus points to the transcendent reality, it cannot by itself grasp that reality or give us a direct experience of it. At best, it can give us an abstract or general idea of absolute reality. It can also be used to rationalise and justify the pure experience through which absolute reality is revealed. This pure experience is not of the nature of thought of any kind nor the result of critical thinking in any sense. It is to be attained, if at all, through contemplation. It is through steady contemplation that there is a realisation of the absolute as pure existence-consciousness. In it the contemplative consciousness becomes one with the contemplated reality. Such contemplation may be, and has sometimes been, called pure thought or intuitive thought. But for us it is not thought proper, for it is neither literal thought nor logical thought in the sense in which these are generally understood by us. Contemplative consciousness does not contain that explicit reference to the subject-object relation which is so essential for thought in the strict sense. As such, it is not so much the actualisation or perfection of thought as the end or termination of it. Hence we conclude that thought gives us a knowledge of the apparent and empirical orders of reality and that it is not by thought but by pure contemplation that we are to realise absolute reality as pure existence-consciousness.

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